
A Nondisruptive Approach to the Environment



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Companies can help the transition to a greener economy without sacrificing their financial interests.

Environmental issues – be it pollution, the depletion of natural resources or climate change – are hot button topics of our world today. While scientists and politicians may debate the extent of problems such as climate change, what is beyond dispute is the increasing pressure placed on companies to assume greater responsibility for the environmental implications of their business operations and to incorporate environmental factors into their business practices.

Often, environmentally conscious business innovations that governments and companies champion are disruptive, displacing existing industries and the jobs that go along with them with new energy sources, materials or production methods. That’s certainly the case when, for example, governments take aim at the fossil fuel industry with the goal to disrupt and displace it due to concerns over carbon dioxide emissions.

But is disruption the only way to transition to a greener economy? And is it necessarily the best way? Our research on market-creating innovation has found that there is an alternative and complementary path to address this challenge that governments and companies should consider. This solution can both work for the financial interest of companies and help us transition to a greener planet in a way and at a pace that our societies can absorb, while avoiding possible social upheaval and job losses.

As outlined in *Beyond Disruption*, a new book by W. Chan Kim and Renée Mauborgne (two of the co-authors of this article), this is called **nondisruptive creation**. In contrast to disruption, nondisruptive creation is an approach to innovation that generates new markets *beyond* existing industry boundaries, thereby avoiding the displacement and disruption of established players or markets and the loss of existing jobs. It is the flipside of existing innovation theory – be it **Schumpeter’s theory of creative destruction** or the more general and popular notion of disruption – that sees creation and destruction as inextricably linked.

By applying nondisruptive creation to the environmental challenge, *Beyond Disruption* shows that companies can create a **positive-sum outcome** for business, the environment and society where no one is made worse off. Here, companies advance a greener planet not in how they spend money or by curtailing their operations, but in the very way they make money to thrive and prosper.

Curbing food waste

Consider the experiences of two organisations: Too Good To Go (TGTG), a Danish start-up, and Tongwei Group, a large established Chinese company. By pursuing nondisruptive creation, both built profitable green businesses that lower carbon emissions while creating a win for the communities they serve.

In the case of TGTG, it set out to tackle the long largely unaddressed problem of food waste and the huge greenhouse gas implications attached to it. Food waste makes up 44 percent of all global waste and a third of all food produced every year. Furthermore, food waste that goes directly into landfills produces methane gas, which contributes to 10 percent of all global greenhouse gas emissions and a whopping 30 to 50 percent of global warming.

Restaurants and food services are significant contributors to food waste, often due to their tendency to overstock ingredients and prepare more food than necessary for fear of running short in serving customers. Many of these establishments are small businesses that lack the expertise and resources to accurately track daily demand and repurpose leftover ingredients. As legal provisions in many countries don't allow expired ingredients and leftover cooked food to be donated to organisations such as food banks, the food is simply thrown out. For restaurants, this becomes an unavoidable cost factor. For the planet, the impact is unnecessary and significant methane.

TGTG addressed this previously taken-for-granted problem via the creation of an app that connects restaurants – and now bakeries and supermarkets – with users who can purchase surplus and unsold food at significantly reduced prices. Each day, partnered food outlets only have to post a “magic bag” of soon-to-be-expired food on TGTG’s app that would be available at the end of the day.

By selecting their desired geographical location, users can browse the app to view magic bags – so called because the specific contents are a surprise – available for collection in nearby areas. All food outlets need to post is the category of food that is in their magic bag, such as vegan products, savoury meals, pastries or simply a random assortment. While users cannot choose the specific food items included in a bag, they can opt to pick up a desired magic bag at a specified time at the selected food outlet – all at a fraction of the original price.

Did TGTG disrupt the existing restaurant, supermarket or bakery industries or lead to a loss of jobs or hurt communities? No. Food service companies love it as it provides them with a new revenue stream. It helps them turn a previous cost factor into a profit maker, while allowing them to know they are contributing to the important cause of helping eliminate food waste, with all the environmental and moral costs attached to it. Communities love it. And with it, our planet is getting greener.

As of 2021, TGTG has a customer base of over 66 million people worldwide, with 85,000 restaurants and food service companies joining its network, resulting in a total of 58 million meals being “saved”. For each purchase, TGTG charges a small flat fee to the seller. Its estimated annual revenue is currently about US\$505 million. The thriving new market TGTG created has benefited all parties concerned.

Through its nondisruptive approach, TGTG has made a distinctive contribution to the greater cause of combating environmental degradation while achieving notable business success and supporting society. It's estimated that one magic bag of food can reduce carbon dioxide emissions by the equivalent of charging a phone 442 times.

Creating green energy

On the other side of the planet, Chinese company Tongwei Group, a global leader in aquafeeds, also created a thriving new market of green energy through nondisruptive creation.

With global pressure mounting for clean, low-carbon energy, there was a new push in China for green sources of energy to help meet the country's commitment to cap carbon emissions before 2030. Nowhere was this needed more than in the regions of eastern and central China, where industrial activities and population are most concentrated and energy demand was soaring.

The challenge presented was that in these regions, the use of any available rural land was strictly limited to agriculture. The result was no land for solar companies to build large-scale solar farms to meet the rising demand for green energy.

Seeing this emerging and unaddressed need, Tongwei Group set out to create a brand-new nondisruptive market of green energy by leveraging its fish farm business. Although aquaculture was already an important source of revenue for Tongwei Group, individual farmers and local governments, the company determined that the economic value of these water resources could be multiplied by leveraging the unutilised water surface to produce green energy.

Tongwei Group created the nondisruptive, fishery-integrated photovoltaic (PV) industry, which essentially integrated a water-based PV system with its innovative cage-type aquacultural facilities. Solar panels were set above the water, lowering water temperatures and reducing photosynthesis and algal growth, which boosted the fish farms' output. Above the water, Tongwei Group also generated electricity with its solar farms.

The effect of this nondisruptive creation was a new source of green energy for the regions, higher income for fish farms, more tax revenues for local

governments and a highly profitable new business for Tongwei Group: Tongwei New Energy. By utilising the water resources of its fish farming business, the company pioneered and created a unique, new and nondisruptive market.

Tongwei Group's market creation did not disrupt existing energy sources or the existing PV industry, as there was no overlap between their fishery-PV integrated farms and conventional land-based solar plants. Furthermore, given the vast areas of aquaculture waters suitable for the deployment of fishery-PV integrated plants, Tongwei Group, at its full capacity, has to date realised just a small fraction of the large potential that the new fishery-PV integration industry holds to address China's rising energy needs. The expanse of this new industry the company has created leaves ample room for further green energy production and for other solar energy players to explore and contribute.

A new approach

We can't expect the ongoing global environmental drive and the associated transformations to be entirely pain and cost free. Without a doubt, disruption is needed to address many environmental issues. While this results in adjustment costs for concerned companies and society, it is unavoidable. However, we need to broaden our approach to the environment to minimise the costs to our own businesses and the shocks and disruptions to industries, jobs and society.

Nondisruptive creation and the experiences of TGTG and Tongwei Group give us hope. Their stories show that with nondisruptive creation, firms can align their business objectives with environmental goals instead of sacrificing one for the other. Through creating a profitable and nondisruptive market, they can generate economic and social benefits for all parties concerned.

As a responsible business, what key environmental challenge does your company face? Can you address it with a positive-sum and nondisruptive approach, like TGTG and Tongwei Group did, thereby creating high growth for your company while benefiting the environment and society? More information about how to identify and realise a nondisruptive opportunity can be found in [***Beyond Disruption***](#).

Find article at

<https://knowledge.insead.edu/strategy/nondisruptive-approach-environment>

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Blue Ocean Strategy

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This series showcases the two professors' thought leadership amid their work as Co-Directors of the **INSEAD Blue Ocean Strategy Institute**. They are also the authors of the New York Times and Wall Street Journal bestseller *Blue Ocean Shift - Beyond Competing*, the international bestseller Blue Ocean Strategy and *Beyond Disruption: Innovate and Achieve Growth Without Displacing Industries, Companies, or Jobs*.