## Foreword by Klaus Schwab



CLIMATE CHANGE IS the defining issue of our time. But our fight against the climate crisis won't be won by worrying about it alone. We need to understand what causes it, and what we must do about it. In Fossil Free, Sumant Sinha does just that: he traces global CO<sub>2</sub> emissions and pollution back to two past energy transitions, and shows how we can enact a 'third energy transition' towards a carbon-light future.

In his book, Sumant first points out the two great energy transitions of the past, which largely coincide with what I call the First and Second Industrial Revolution. They gave us the industrialized world as we know it, including abundant coal-fired power, the internal combustion engine and, of course, incredible leaps in wealth and prosperity. But they were equally responsible for a divergence in development across nations, an increase in global inequality, and—in this context, most importantly—an acceleration of climate change and environmental pollution.

As Sumant shows, however, there is good news on the horizon: we can achieve a third energy transition, characterized by clean and renewable energy. It could give economies a much-needed boost, and contribute to xii Foreword

a more sustainable future. That transition, in fact, is already underway: the world is adding more clean energy on to the grid today than ever before; global investments in clean energy assets touched nearly \$300 billion in 2019, and an ever-increasing number of investors, action groups and governments favour 'clean' over 'coal'.

But to succeed, this transition must be led by Asia, which houses two thirds of the global population and is responsible for half of global GDP. More particularly, India and China must lead the way. Just in the past few years, these two rising global economic powers have become responsible for most of the world's new coal-fired energy plants. Seen from where they are in their energy transition, it makes sense. India had a late start to previous industrial revolutions, and had some catching up to do on power generation. Coal plants provided a straightforward option.

As Sumant shows, countries such as India can also choose another path. Through a combination of individual entrepreneurship, institutional investments and the right incentives in government procurement, he writes, 'growth in renewables and cleantech in India can be a huge opportunity and certainly place the country in the top three in the world over the next several years'. That would mean they could become leaders, rather than latecomers, in this new energy transition.

To a certain extent, that transition is already taking place. Since 2014, the Indian government has strongly emphasized the need to move away from coal-based electricity capacity in the tendering processes. But to tip the balance further towards green power, it must be favoured not only where it is most cost-effective, but also where it adds most long-term value to economy and society. Green power projects combine the creation of new jobs and long-term benefits including the reduction of carbon emissions, thus better air quality and improved human health.

Everyone in India – and every reader of this book – has an incentive to get this right. If India would rely squarely on fossil fuels to power its continued economic rise, it would only add to the global climate crisis. Surely, this is not a crisis that India initiated. That questionable honour is for the most industrialized nations in the West. However, India's actions will, together with those of other (rising) powers, shape the world over

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the next hundred years. By taking the lead, India can not only pave the way for itself but provide a model for the rest of the world to replicate and solve the climate crisis.

Climate action is still too often perceived as a cost or a trade-off with other priorities. It should instead be viewed as an opportunity for businesses, countries and individuals to create an advantage in building a better, more sustainable world. This book puts this principle into practice and provides an important roadmap. I am looking forward to seeing its recommendations play out in the years ahead.

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