Aspect8

What investors can learn from Bill Gates' climate warning

When one of the world's wealthiest individuals writes a book on avoiding climate disaster – and suggests changes we all need to make to our lifestyles – it is easy to be cynical.

But the high-profile intervention of Microsoft founder Bill Gates in the climate change debate should be welcomed. This is not just a highly intelligent wealth creator, but somebody who, arguably, has unique access to information and insight. Furthermore, his Gates Foundation has achieved impressive results in tackling global health and education issues. He clearly has an appetite for solving the seemingly unsolvable.

His book, *How to Avoid a Climate Change Disaster: The Solutions We Have and the Breakthroughs We Need*, should be a must read, particularly for those investing in the great energy transition.

He captures the challenge of the century: how do we stop adding of 51 billion tons of greenhouse gases to the atmosphere every year. This needs to be done as fast as possible to avoid climate disaster and in an economic and balanced way.

Gates sets out the need to quickly reduce our reliance on fossil fuels over the next 30 years to get to net zero. Net zero does not necessarily mean that we will not be using fossil fuels anymore. In power generation and in ground transportation, that is a strong possibility, but in other areas, such as steel and cement manufacturing, or fertilisers or even lightweight plastics, we will likely still be using some fossil fuels. Carbon, however, will need to be captured rather than released into the atmosphere.

The first part of the book provides some simple messages that cannot be ignored:

- We need to do this now; it is not optional. We need to invest time and money right now to avoid a climate disaster that will have a considerably bigger economic and social impact than all previous post-war recessionary periods put together.
- We have reached a position where we need to get carbon emissions to zero (or close to it) by 2050. Slow progress still leads to catastrophe. For example, a 50% reduction in emissions from here would still lead to rising temperatures.
- Our current reliance on fossil fuels makes the starting point of this structural shift very hard. Not only do we use fossil fuels in almost everything we do, from driving our cars to brushing our teeth, they are also extremely cheap. Unless we commit to investing in zero carbon solutions, thereby reducing their costs, progress will be slow.

The next part of the book is a little more optimistic:

- There are lots of potential solutions that we can apply in combination that would tackle carbon emissions across energy networks, transportation, agriculture, and manufacturing.
- Governments have become much more aligned in the last few years. The 2015 Paris Agreement was a big step forward. However, from here individual governments need to set policy that stimulates investment in the right areas in order to drive down costs.
- Clear government policy reduces the risk for investors in key technologies and underpins investment growth.
- A lot of the technologies are already cost effective for both the investor making a suitable return on their investment, and for the consumer, in terms of being able to pay for the end product. A positive cycle is created: the cost profile of these value chains only gets better as the end market size increases. Government policy can accelerate this trend.

- Carbon taxes will need to be applied in a considered manner across developed markets versus emerging markets. They must be applied at industry level to encourage investment in clean areas, but also to consumers in order to encourage switching and drive demand.

The global energy system, when you combine electricity, transportation, and heating/cooling, is effectively responsible for half of the 51 billion tons of greenhouse gases being released into the atmosphere. This change in the energy system to a more sustainable system is what people now refer to as the “energy transition”.

Investing our money responsibly in companies directly involved in the structural shift of the global energy system will be key over the next 30 years.

The book underlines six of the most important messages:

1. This structural shift in the energy system is a multi-decade investment phase: it is not cyclical, it is structural.
2. This investment phase has only just started and needs to accelerate from current levels to get anywhere close to net zero by 2050.
3. The amount of investment - estimated to be close to $100 trillion between 2020 and 2050 - is significant, both in terms of relative to previous energy investment cycles and relative to other industries.
4. Government policy is becoming ever more supportive and they will play a key role in incentivising investment, dis-incentivising areas of high emissions and driving down costs in key emerging technologies.
5. Costs within the energy transition value chain are already at a level in key technologies where they compete head on with fossil fuel alternatives. These costs will keep falling on a relative basis.
6. Consumers at both the commercial and residential level are increasingly shifting towards these end products, whether it is Microsoft only sourcing electricity from renewables or consumers buying electric cars. This trend will only accelerate over the next few years.

Long before he turned his attention to climate change and wrote this book, Gates had already articulated what can help in solving the seemingly unsolvable. And it has resonance for investors.

In 1996, he wrote: “We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next 10. Don’t let yourself be lulled into inaction.”