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## CF Industries' New Strategy: Turning Business Pressures into Fuel for Sustainable Growth

Tony Will, CEO at leading nitrogen fertilizer manufacturer CF Industries, was feeling pressed as he prepared for the company's annual strategy process in the summer of 2020. This was a regular undertaking in the lead-up to the July board meeting, but it was far from routine this year. Global demand for nitrogen had grown in 2019,<sup>1</sup> but over the horizon Will and the executive team at CF Industries saw three rising trends threatening the business.<sup>2</sup>

First, widespread adoption of electric vehicles was likely to negatively affect ethanol demand. Fewer miles driven in internal combustion vehicles could mean fewer gallons of gasoline used, which—thanks to the U.S. Renewable Fuel Standard requiring that 10% of gasoline be renewable fuel—would mean less ethanol consumed. If ethanol consumption were to drop, so too would demand for corn, and with it demand for nitrogen fertilizer. Ethanol production accounted for around 38% of U.S. corn demand in 2019, so this could mean a substantial decrease in nitrogenous fertilizer purchases.<sup>3</sup>

Second, plant-based meats and other animal product substitutes posed a similar threat to corn demand. About a third of the U.S. corn crop was used as feed for cattle, hogs, and poultry in 2019.<sup>4</sup> Declines in meat, egg, and dairy demand thereby threatened nitrogen demand, as well.

Third, Will was very aware of social and governmental pressures to decarbonize, and synthetic ammonia production (the foundation of nitrogenous fertilizers) required significant energy input and created CO<sub>2</sub> as a byproduct. The pressure to address CF Industries' carbon footprint was more than simply political; carbon taxes could be significant costs.

Will knew that CF Industries needed a strategy that would withstand the fast-approaching future. He didn't know what that would look like yet, but he urgently needed to figure it out, because his recommendations were due before the July board meeting.

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