Decades ago, their own scientists told car companies and oil companies about climate change, information the companies chose to ignore. The scientists were voices crying out in the corporate wilderness. Sadly, they were ignored at the time, but companies are starting to pay the price for that in lawsuits. Those scientists advocated for the truth, and their stories deserve telling.

Let's start with the car industry. An article in E&E News describes some of the efforts of scientists in the industry. There was Ruth Reck, a young physical chemist who went to work for GM over fifty years ago. There were few women in the field back then— very few. Reck graduated from Mankato State University at 18 and had gone on to get a Ph.D at the University of Minnesota. She met a visiting physicist from Princeton on her very first week on the job. He talked her into studying climate change. Management approved her shift in emphasis, hoping that she would prove that aerosols in the atmosphere (including those from auto exhaust) would completely offset the greenhouse gas effect. Her research didn't come out that way. She and another GM scientist published their work and presented their findings to GM's VP for government relations (a/k/a "head lobbyist"). Later, she explained her work to two top executives at GM who became CEOs.

Rather than heeding her warnings, the company doubled down on gas-guzzling SUVs and pick-up trucks. Reck says she left GM when the company called her research to a halt. She went on to become the head of the climate change program at Argonne National Lab and a professor at UC Davis.

Over at Ford, Gilbert Plass had left a position at Johns Hopkins to work in the company's aerospace division. He had already written about global warming before starting there in 1956. In the early 1960s, he wrote again about fossil fuels as causes of global warming. Like GM, Ford seems to have paid no attention.

What about the oil industry? In July 1977, according to *Inside Climate News,* a senior scientist at what is now Exxon Mobile told the company that "there is general scientific agreement that the most likely manner in which mankind is influencing the global climate is through carbon dioxide release from the burning of fossil fuels." The scientist, James F. Black, had participated in a National Academy of Sciences report that said CO_2 increases might eventually require reducing the use of fossil fuels. Management decided to look into the problem and assembled a team of scientists to investigate. The LA Times detailed some of the research, including a study launched by a scientist named Henry Shaw to use an oil tanker to measure

how effectively the ocean was removing CO2 from the atmosphere. After three years, not liking what the scientists had found, Exxon killed the program.

You can't fairly call these scientists heroic. Their research findings apparently didn't endanger their careers. Still, they had to be aware that their findings weren't exactly what their corporate bosses were looking for. They went ahead and did their work, reporting their findings honestly to the company and to scientific journals. Integrity isn't one of the more glamorous virtues but it may be one of the most important. These industry scientists deserve plenty of credit on that score. The same can't be said for the corporate leaders who ignored their findings and promoted public views of climate science they knew were untrue.

What would have happened if corporate leaders had listened? Let me close with a story told by one scientist who worked for Exxon in the 1980s:

> Back in 1980, there was a guy working for Exxon and he was one of the inventors of the lithium battery, which electric cars now use. This guy won the Nobel prize in chemistry for his work on lithium batteries. Just imagine if Exxon management had taken our prediction seriously! They could have easily built huge factories to make lithium batteries to facilitate the transition to electric cars. Instead, they fired this guy.

That's the road not taken. Something to ponder.