## Sophie Sez #2: "Obama Missed a Golden Opportunity – but We Can Still Win!"

**Summary.** Young people, threatened with inheriting climate chaos and sea level rising out of control, filed a lawsuit against the U.S. government. The Obama Administration missed a great opportunity to settle the case in a way that could have constrained later administrations to reduce  $CO_2$  emissions at the rate Secretary of State John Kerry proposed in 2016.

Key words: Climate Change, Sea Level, Fossil Fuel Emissions, Lawsuit, Clean Power Plan

## Transcript

**<u>Hi, I'm Sophie Kivlehan.</u>** I am one of 21 young people who, along with my grandfather James Hansen, filed a lawsuit against the United States government for violating Constitutional rights of young people -- the right to life, liberty and pursuit of happiness – and property.

We are in danger of inheriting a world with climate change and climate chaos running out of our control, unless fossil fuel emissions are reduced.

**Jim:** Rising sea level is the greatest threat. More than half of the large cities are on coast lines. Boston, New York, Philadelphia, Washington – think of all the coastline cities – the cost of the infrastructure, and the number of refugees that would be created throughout the world. It would be immoral to hand young people a situation in which that eventual outcome is locked in.

**Sophie:** Global warming now exceeds 1°C, about 2°F. If we allow it to reach 2°C, that will be at least as warm as the prior interglacial, a warm period, when sea level reached 6-9 meters higher than today. That's 20-30 feet, enough to make most coastal cities dysfunctional. The last time global warming reached 3 to 4°C, sea level was 20-30 meters, 65-100 feet, higher than today, which would submerge most of Florida, Netherlands, Bangladesh and much of China.

**Jim:** If Earth gets  $2^{\circ}$ C warmer – or  $3-4^{\circ}$ C – the ocean will stay that hot for centuries. The ocean is so massive that it cannot cool quickly. Exactly how fast sea level will rise is difficult to say, but we know it will rise many meters if the temperature rises a few degrees.

We have concluded that multi-meter sea level rise will occur within 50-150 years, if high fossil fuel emissions continue -- because once disintegration begins, amplifying feedbacks occur, such as hydrofracturing and cliff failure, which simply means that ice can collapse. Ice is not stone.

**Sophie:** We must reduce fossil fuel emissions rapidly to minimize sea level rise. In our lawsuit, we asked for 6%/year exponential emission reduction. The Obama Administration argued, before the U.S. District Court in Oregon, that such rapid reduction is not possible. Even Judge Coffin was concerned by the steep reduction requested, but he said the alleged climate consequences were "beyond the pale" – so he ruled that our lawsuit should proceed.

Concern about the difficulty of rapid reduction may be in part a misunderstanding about the difference between exponential and linear reductions. Let's compare them.

Many governments have suggested that they will reduce emissions 80% or more by mid-century. A linear reduction of 80% in 30 years is 80 divided by 30, or 2.67% <u>of the original amount</u> each year. On the other hand, if reductions are a fixed percent <u>of remaining emissions</u>, achieving 80% reduction in 30 years requires a rate of 5.2% of remaining emissions each year.

The <u>exponential case</u> is based on the concept of "low hanging fruit" – the idea that there are some easy reductions at the beginning. However, the <u>linear case</u> is a better approximation if there is a gradually increasing carbon tax or carbon fee, as we will discuss in our next video.

There are two important points: <u>first</u>, these two curves yield <u>exactly</u> the same total emissions – so they are equivalent for climate change, which depends on total emissions. <u>Second</u>, the rate of reduction in the more realistic linear case is less than 3 percent per year – it is plausible!

**Jim:** In fact, Secretary of State John Kerry presented a plan in Morocco last year to reduce United States emissions 80% by 2050, which is almost as fast as we requested. So I proposed to high levels in the Obama Administration that we have a settlement or partial settlement of our lawsuit. A plaintiff is permitted to speak with defendants about a possible settlement.

I suggested that the government simply agree to reduce emissions <u>at least</u> 80% by 2050. The government would decide how to do that, but the Court would oversee the settlement, analogous to the case of civil rights. The Court did not tell the government how to desegregate, but it required the government to report back, to assure that Constitutional rights were not violated.

In our case, the other plaintiffs would need to agree to the settlement, but I was confident of persuading them, because 80% was very close to what we were asking, and the agreement would be <u>at least</u> 80 percent, with the possibility of later strengthening.

**Sophie:** Judge Coffin and Judge Aiken encouraged a settlement several times. They asked the lawyers for the Department of Justice, in so many words, "Why are you fighting this? You agree about climate change and the need to phase down emissions. Why not just agree to do it?"

Such an agreement would have constrained later Administrations. Unfortunately, President Obama rejected the proposed settlement.

**Jim:** Once again, President Obama was poorly served by his advisers. I admire President Obama. He and his family were exemplary. But Obama failed to deliver the fundamental change in Washington that he promised. In the case of climate, which was one of his top objectives, he did not understand what was needed, and his advisers did a **terrible** job.

Even though his party initially controlled both houses of Congress, they pushed a cap-and-tax gimmick designed for big banks and any lobbyist in the Washington swamp who could raise his arm. So they had to resort to the ineffectual Clean Power Plan.

**Sophie:** President Obama missed a **golden opportunity** to set the world on a path to rapid fossil fuel emission reduction. But it is still practical to achieve that. A linear two and one-half percent reduction per year would yield an 80 percent reduction in 32 years.

This can happen, but only if the public, including young people, understand what is needed and begin to influence our government. We will talk about that in our next video.