Trump can't end life with his climate change policy but he can make us very hot

In four years, he can accelerate global warming but not significantly move the long-term trends, say climate change professors – who don't see him heeding the March of Scientists. At all.

By Ruth Schuster | Jan. 26, 2017 | 7:06 PM

Perhaps stung by the accusation that he lies like he breathes and that his campaign promises weren't worth the paper they weren't written on, Donald Trump has hastened to take action on some fronts, including climate change science. Now science is hitting back with a planned March of Scientists. You don't have to have a degree to join, just a respect for facts (real empiric ones, not the "alternative" ones), say the organizers.

"The march is unlikely to affect him, but sometimes a stand has to be taken," one Israeli professor told Haaretz.

Trump seems to accept that global warming is happening to his businesses, though he has stated that climate change is a Chinese hoax, and vowed to slash or eliminate scientific budgets to study the problem. His attempts not to only to castrate but to gag science are behind the scientists leaving the lab and hitting the streets (twitter tag ScienceMarchDC), at least, soon. The date hasn't been set yet.

But to what degree could Trump affect the trajectory of climate change at the global level, even if he does his worst? Could he affect long-term trends?

"In the space of four years? Well, the president of the United States can change legislation and the volume of activity by industry, and of course it will affect the world. He could cause climate change to accelerate or decelerate. But he isn't likely to change the long-term trend going back to the start of the Industrial Revolution," says Dr Tal Svoray of the Ben-Gurion University Department of Geography and Environmental Development, stressing however that his speculation on the subject is just that, not data-driven.

Trump wouldn't be dooming life on the planet, agrees Prof. Alon Angert, Head of the Environmental Sciences Program at the Hebrew University of Jerusalem. That said: "Such action would be dangerous, and undermine the
current efforts to limit greenhouse gases emission. It has yet to be seen how much damage he can make, given that other countries still support the Paris agreement," Angert told Haaretz. "However we are not talking about doomsday. We are talking about real problems we can solve if we take the right measures at the right time (now)."

**The temperature is rising**

According to NASA, since the start of the Industrial Revolution in 1880, the average global temperature on Earth has increased by about 0.8° Celsius (1.4° Fahrenheit). Alarmingly, two-thirds of the world's warming has occurred since 1975.

Less than one degree change in average global temperature in the space of 137 years sounds underwhelming. It isn't. NASA: "A one-degree global change is significant because it takes a vast amount of heat to warm all the oceans, atmosphere, and land by that much."

The so-called Little Ice Age from around 1300 to 1870 was caused by a temperature drop of 1 to 2 degrees, no more. And the major Ice Age of 20,000 years ago was caused by a 5-degree change in average temperature. So yes, a 1-degree change matters.

From 2017 to the year 2060, given the present trajectory of global warming, the temperature in Israel is expected to rise by about 1.4 degrees Celsius on average, climate change expert Prof. Pinhas Alpert of Tel Aviv University told Haaretz.

For the sake of round numbers – seen from the year 1961 to the year 2060, the mean temperature in Israel is expected to have risen by 2 degrees Celsius.

Moreover, Israel is expected to be a lot drier. "The mean annual Israeli rainfall is predicted to drop by 10% by 2050," Alpert says.

By the year 2100, if greenhouse gas emissions remain uncontrolled, the Middle East is expected to become unsurvivably hot.

**The National Parks resistance movement**

Trump seems determined to test the theories. Less than a week after his inauguration, he named a climate change-denier Oklahoma Attorney General Scott Pruitt, as head of the Environmental Protection Agency and ordered climate-change information to be removed from the EPA website, moves heatedly protested by – among others – a resistance group forming within the
National Park Service). Trump also instituted a blackout at the EPA, prohibiting its people from talking with the press or posting anything on social media about pending regulatory changes.

As the backlash mushroomed, the Trump team backtracked to a degree, with Trump's climate spokesman, Doug Ericksen, telling The Hill on Wednesday that they are just reviewing the “editorial” bits of the EPA website, not necessarily planning to take down all climate data.

In contrast to Trump's assertion that the science about climate change isn't clear, it is. Its anthropomorphic sources are also clear by now, chiefly thanks to the empiric fact that the carbon dioxide concentration in the atmosphere has never risen this fast before, over the last 300 million years at least.

**If America does nothing**

The scientists arranging the march on the White House hope to affect policy. And if they can't? Could "corrective" policies by Germany and Europe matter at all in a world where America is ignoring its contribution to climate change?

"The U.S., Europe and China are major greenhouse gas emitters," Angert explains. "If Europe and China stick to the Paris agreement, we will still see some improvement. Moreover, it seems that even if the U.S. federal government fails to act, some states and even cities in the US are already doing their share."

To do their share, they have to accept the facts, which has suddenly become not an obvious thing. "As a society we should not accept lies. Not about science, and not about other aspects. There is no such thing as 'alternative facts,'" says Angert. "There are lies, and there are deceits. We should not tolerate or forgive someone that is been evidently shown to lie again and again to the public, no matter if it is a tobacco industry 'scientist', a global warming denier, or a politician."

One area where Trump's influence could be particularly toxic is the development of technologies to advance decarbonization.

"There is no single silver bullet, but many studies showed that combination of existing technologies can prevent greenhouse gas emissions from continuing to grow at the alarming rate they are growing now," says Angert. "These technologies include renewable energy, efficient energy use, and carbon sequestration. What we are lacking is not technology, but political will."
Donald Trump has will, but not to alleviate the state of the planet, and he seems unswayed by "facts". How likely is he to be swayed by a March of Scientists? "I can't imagine it would change a thing," Svoray sighs.