Having read a lot of takes on the outcome of the latest UN climate conclave, I wanted to see for myself what the <u>agreement</u> says. The key provision in the latest international agreement on emissions reduction is section 28 of Article 2(A).. It states the position of the Conference of the Parties — the consensus position of all 200 countries — emission reductions. This group of nearly all the world's nations says that it:

**[R]ecognizes the need for deep, rapid and sustained reductions in greenhouse gas emissions in line with 1.5 °C pathways** and calls on Parties to contribute to the following global efforts, in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches:

## (a) Tripling renewable energy capacity globally and doubling the global average annual rate of energy efficiency improvements by 2030;

(b) Accelerating efforts towards the phase-down of unabated coal power;

(c) Accelerating efforts globally towards net zero emission energy systems, utilizing zero- and low-carbon fuels well before or by around mid-century;

## (d) Transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner, accelerating action in this critical decade, so as to achieve net zero by 2050 in keeping with the science;

(e) Accelerating zero- and low-emission technologies, including, inter alia, renewables, nuclear, abatement and removal technologies such as carbon capture and utilization and storage, particularly in hard-to-abate sectors, and low-carbon hydrogen production;

(f) Accelerating and substantially reducing non-carbon-dioxide emissions globally, including in particular methane emissions by 2030;

(g) Accelerating the reduction of emissions from road transport on a range of pathways, including through development of infrastructure and rapid deployment of zero and low-emission vehicles;

(h) Phasing out inefficient fossil fuel subsidies that do not address energy poverty or just transitions, as soon as possible;

I've highlighted the provisions that have gotten the most attention. (There were also some complaints about the subsection (e) because of its promotion of carbon capture and

hydrogen as options.) But other aspects of section 28 are also noteworthy.

**The 2050 deadline.** The first and most important is the agreement on achieving net-zero globally by 2050. This goal appears in subsection (d) and is also set forth in section 27. That's sooner than the big emerging economies have previously planned. This goal is crucial but will not be easy to achieve.

The "phase down" of coal. Another noteworthy provision is the somewhat stronger language about coal compared to oil and gas. Coal is supposed to be "phased down" except where the resulting carbon dioxide is removed and securely stored (which may or may not actually be feasible). Coal clearly does not have the same clout as oil and gas, either in domestic politics or international negotiations.

**Transportation.** Also significant is the attention to the transportation sector. Subsection (g) calls for accelerating use of zero emission vehicles (basically, electric cars and trucks), as well as public transportation.

**Non-CO2 greenhouse gases**. In a fourth significant subsection, section 28 highlights the role of greenhouse gases other than carbon dioxide. Methane is at the top of the list of those gases, and reducing emissions will require a global effort to regulate methane emissions from coal mines as well as oil and gas operations.

**Fossil fuel subsidies.** Finally, subsection (h) devotes attention to "inefficient fossil fuel subsidies," which are supposed to be eliminated as soon as possible. Those subsidies are immense, and any progress along those lines would be greatly welcome.

There was considerable disappointment that some of this language was not strong enough, especially the failure to require "phasing out" fossil fuels. And there are certainly weasel words in section 28, both in the individual subsection and in the opening language suggesting flexibility based on each country's circumstances.

But Section 28 could be given a stronger interpretation. All the other portions of section 28 have to be read in light of the commitments in subsection (d) and in section 27 to achieve a net-zero energy system by 2050. That's going to require an all-out effort to implement each and every portion of section 28. In particular, it leaves almost no room for any use of fossil fuels that results in emissions of carbon dioxide. The vaguer language used in some subsections is nothing more than diplomatic phrasing of what is substantively a mandate to end emissions from fossil fuel use.

Keeping in mind that international agreements require the consent of all parties, bringing the Saudis and others on board is a real achievement. That's not to say, however, that the critics are wrong to demand much more — moving a larger boulder even slowly requires a lot of hard shoving.

It's important to keep in mind that global climate policy is no longer a top-down enterprise where we are relying on UN negotiations to save us. No one climate strategy is going to save the day. The UN negotiations do provide a framework for countries to coordinate their actions, as well as putting some pressure on them to act. A lot of other coordination between California and other subnational governments, between governments and corporations, and between NGOs — takes place in the side events that take place outside the formal event. But bottom-up climate action is just as important. Ultimately, emissions reduction must happen on the ground, not in a UN meeting.