We give lots of lip service describing climate change as an emergency or existential threat. According to the Climate Emergency Declaration Organization, <u>2336 jurisdictions</u> around the world have declared it to be an emergency, but we are not really acting like it. There are many possible emergency actions. I'm looking at 6 that could make a significant difference, are doable, but require real sacrifice and hard choices:

- 1. Ending financing of fossil fuel projects
- 2. Accelerating renewable siting on- and offshore
- 3. Fast tracking transmission
- 4. Requiring large-scale carbon capture
- 5. International agreement and focus on methane
- 6. Ending deforestation

Today, it's accelerating renewable siting and fast tracking transmission. (Here's Part 1)

Estimates vary, but California, the US, and the world will need a lot of new solar and energy storage facilities and a lot of land to put them on. In California alone, it may require 500,000 acres. Importantly, that number can be reduced in many ways: greater solar panel efficiency (possibly through new materials like perovskites), panels on waste sites, panels on aqueducts, agrivotaics (solar and agriculture combined), roof-top solar, off-shore wind, and increased and improved energy storage (often co-located with renewables). Regardless, renewable energy requires land, and land for renewables creates lots of conflicts, with landowners, local governments, environmentalists, and competing development interests. And the volume of renewable energy required requires significant new transmission, which creates even more land use conflict.

Building transmission lines in California can take <u>ten years</u> or more from proposal to construction. And siting and building solar facilities is also a multi-year process. There are often good reasons for the process – environmental impacts, endangered species, right-of-way issues, water crossings, impact on land values, fire danger, to name a few. These are legitimate concerns that cannot simply be pushed aside. But, in an emergency, we need to change our approach, find compromise, consider risk differently, and move much more rapidly.

In 2016, when I was a senior advisor to Governor Jerry Brown, I proposed a pilot approach, which we initiated with CLEE and <u>Terry Watt</u> to identify lands in the San Joaquin Valley that the participants, including environmental groups, ranchers, farmers, solar industry, and local governments, were subject to the least conflict for solar facilities and therefore were less likely to be subjected to litigation and other delays. The initiative took six months and

resulted in a <u>report</u> that identified some hundreds of thousands of acres of potential least conflict lands. This year, Washington State has used the <u>same process</u> for evaluating lands on the Columbia Plateau. The approach is fast and effective and can be combined with identifying the highest priority transmission lines.

In the San Joaquin Valley initiative, most of the least conflict lands identified are in the Westlands Water District, an area constrained by limits to transmission capacity. If the State and Westlands prioritized that area for large-scale solar development (and energy storage), the State could fast track transmission upgrades. In addition, solar developers could include local communities in the process from the outset through <u>community benefits</u> <u>agreements</u> so that impacted communities also share in the benefits.

This approach can be replicated in California and beyond and has the potential to streamline multiple multi-year processes, but it requires lots of buy-in. So, an emergency response that accelerates renewable siting and fast tracks transmission requires that:

- The State government, and likely the Governor, make siting and transmission a central priority, potentially with direct Governor's Office involvement
- Local governments participate in the process rather than opposing it
- Developers compromise on siting location, modify siting as needed for environmental benefits, engage with local communities from the outset
- Farmers, ranchers, other landowners engage with developers, government officials, and local communities
- Environmental groups recognize the need for solar development and find areas of least conflict, even where projects may have some impact
- Community groups engage in discussions with developers

This approach is challenging and requires commitment, but that's part of emergency response. The climate change emergency response need not be as frantic, at least not until climate change impacts become even more acute.

Next time: requiring carbon capture.