Why CO_2 is harder to remove from the atmosphere than most realise

The risk that methane poses long term, is much lower than the risk CO_2 poses. This reality is being overlooked in the policy area.

When we approach 2 degrees of warming that the Paris Agreement states we must stay below, and something must be done urgently, CO_2 will be the hard one to get out of the atmosphere.

One option to ensure we don't hit the tipping point, is removing Australian cattle from the paddocks, and the methane will simply dissolve after about 12 years, as part of the chemical reaction with OH radicals. Fairness goes out the window if the wellbeing of everybody is at stake, however, now is not the time to reduce cattle methane here in Australia, just because we want to take longer to get CO_2 emissions down to zero. Accumulating CO_2 in the atmosphere is what is moving us towards 2 degrees, not stable methane emissions from Australian cattle.

When it comes to CO_2, you have to do something concrete and expensive to remove the CO_2 from the atmosphere. Trees could be planted, or CO_2 could be stored underground. And here is the catch, more CO_2 has to be removed from the atmosphere than you would expect. The problem is that when you remove CO_2 from the atmosphere, the oceans will start releasing CO_2 into the atmosphere, and replace a lot of the CO_2 that you have removed.

Natural systems will always keep equalising things. When you release CO_2 into the atmosphere, the oceans work in your favour, because they keep pulling a lot of it out of the atmosphere and absorbing it. However, when you are trying to remove CO_2 from the atmosphere, the oceans work against you. Put simply, storing a ton of carbon in a tree is not going to remove a ton of carbon out of the atmosphere, because of what the oceans release into the atmosphere. You would probably only remove about 0.7 of a ton of carbon.