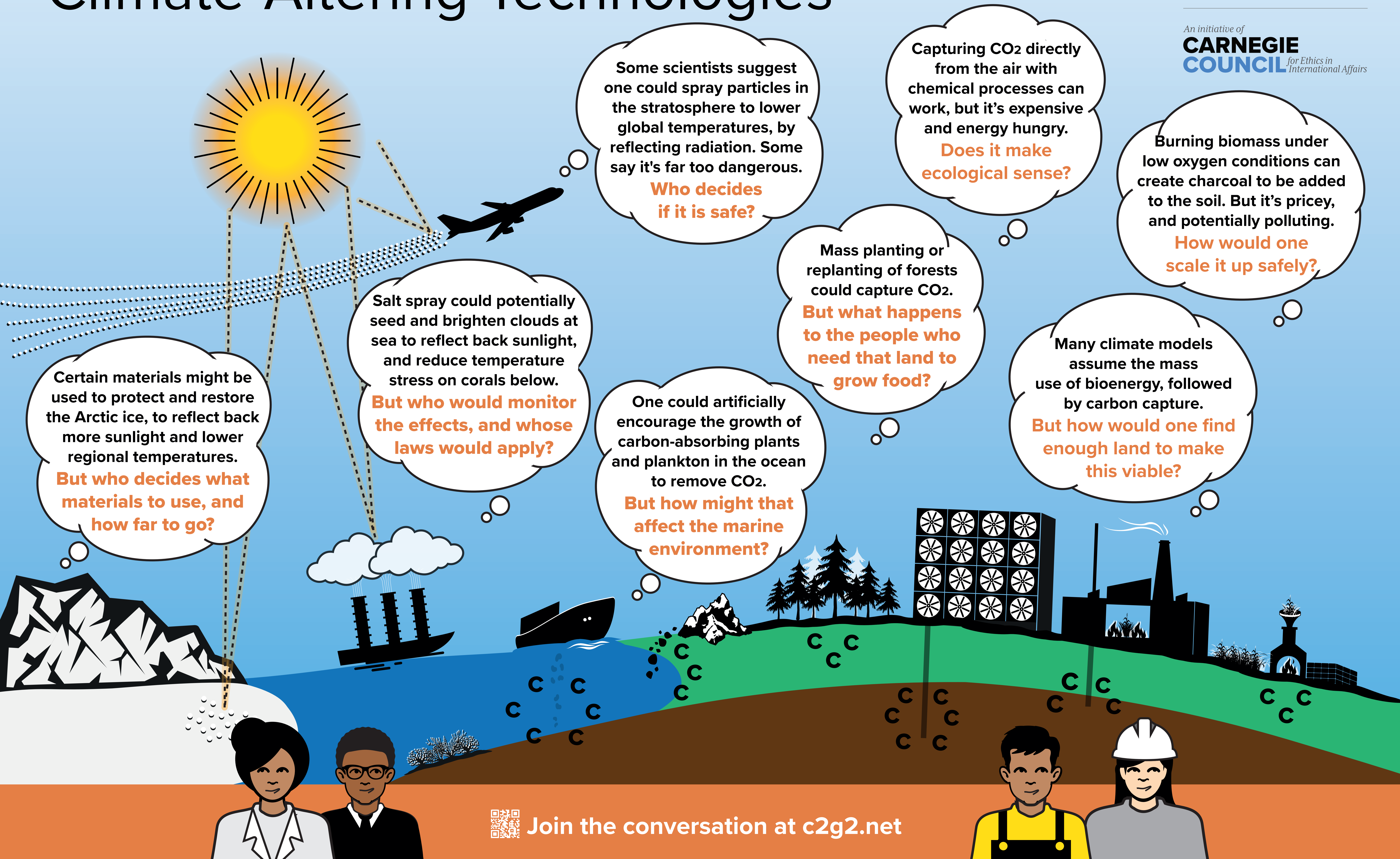


# Climate-Altering Technologies



Certain materials might be used to protect and restore the Arctic ice, to reflect back more sunlight and lower regional temperatures.  
**But who decides what materials to use, and how far to go?**

Salt spray could potentially seed and brighten clouds at sea to reflect back sunlight, and reduce temperature stress on corals below.  
**But who would monitor the effects, and whose laws would apply?**

Some scientists suggest one could spray particles in the stratosphere to lower global temperatures, by reflecting radiation. Some say it's far too dangerous.  
**Who decides if it is safe?**

One could artificially encourage the growth of carbon-absorbing plants and plankton in the ocean to remove CO<sub>2</sub>.  
**But how might that affect the marine environment?**

Mass planting or replanting of forests could capture CO<sub>2</sub>.  
**But what happens to the people who need that land to grow food?**

Capturing CO<sub>2</sub> directly from the air with chemical processes can work, but it's expensive and energy hungry.  
**Does it make ecological sense?**

Many climate models assume the mass use of bioenergy, followed by carbon capture.  
**But how would one find enough land to make this viable?**

Burning biomass under low oxygen conditions can create charcoal to be added to the soil. But it's pricey, and potentially polluting.  
**How would one scale it up safely?**

