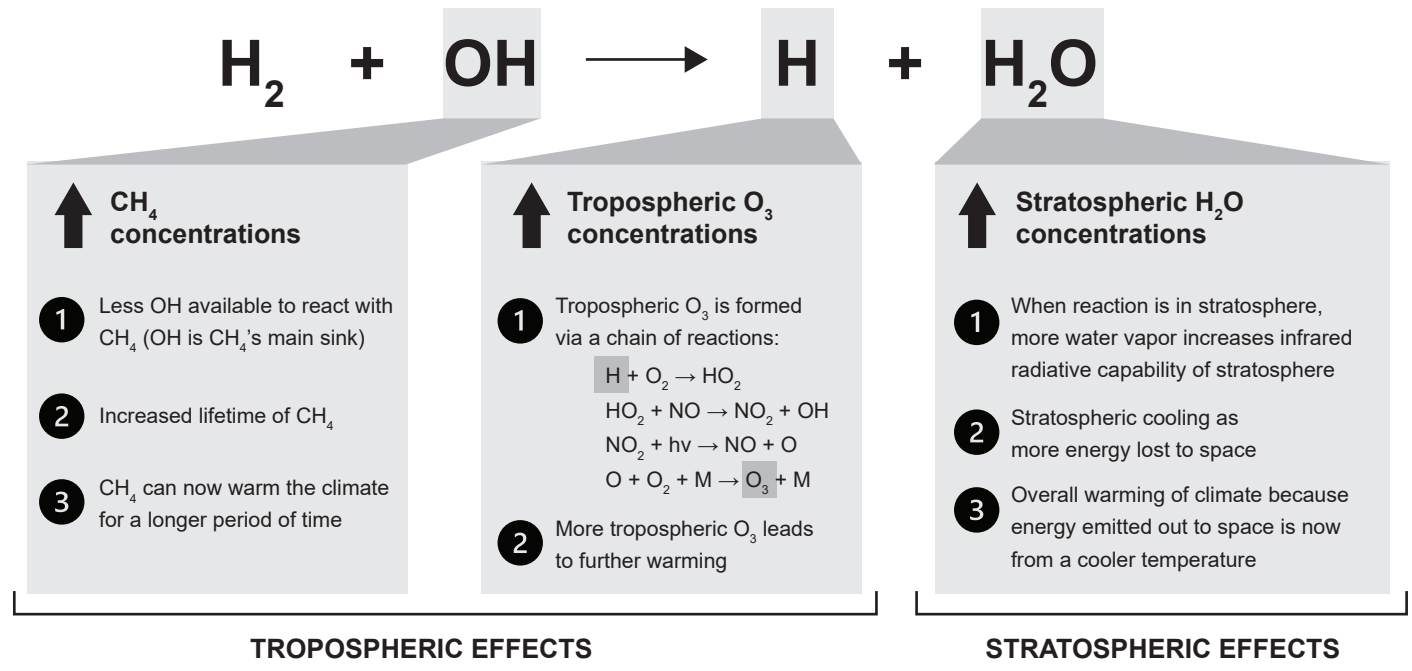
H2 + OH → H + H2O
CH4 concentrations
1 Less OH available to react with CH4 (OH is CH4's main sink)
2 Increased lifetime of CH4
3 CH4 can now warm the climate for a longer period of time
Tropospheric O3 concentrations
1 Tropospheric O3 is formed via a chain of reactions:
H + O2 → HO2
HO2 + NO → NO2 + OH
NO2 + hv → NO + O
O + O2 + M → O3 + M
2 More tropospheric O3 leads to further warming
Stratospheric H2O concentrations
1 When reaction is in stratosphere, more water vapor increases infrared radiative capability of stratosphere
2 Stratospheric cooling as more energy lost to space
3 Overall warming of climate because energy emitted out to space is now from a cooler temperature
TROPOSPHERIC EFFECTS
STRATOSPHERIC EFFECTS