

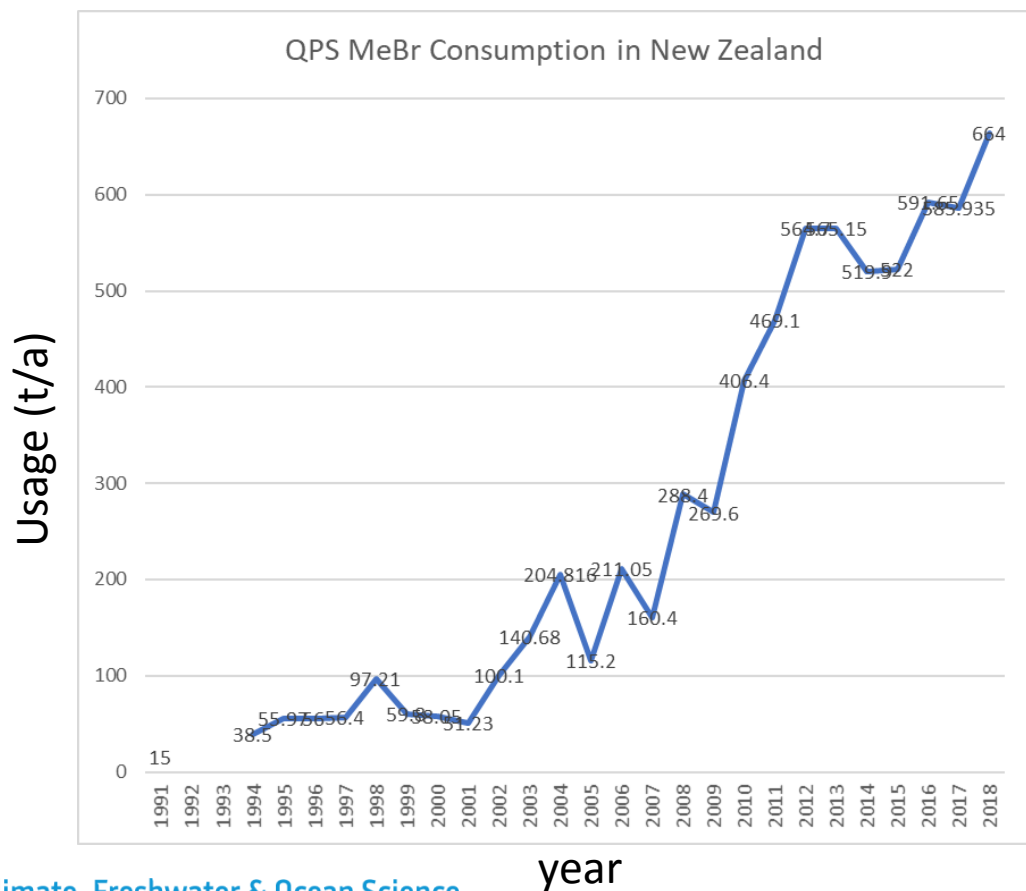
# New Zealand usage of Methyl Bromide

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# Global abundance and usage of methyl bromide

- Globally, MeBr has been slowly decreasing in abundance in recent years.
- QPS usage now globally outweighs non-QPS usage which is banned.
- At 664t, in 2018 New Zealand is the 6<sup>th</sup> largest emitter by country, after the USA (2260t), India (1552t), China (1228t), Vietnam (908t), and Australia (682t), and ahead of Japan (483t) and South Korea (481t).
- On a per-capita basis, New Zealand is the world's largest emitter.

# Reported New Zealand QPS consumption of MeBr



[https://ozone.unep.org/countries/data-table?report\\_type=4&period\\_start=1986&period\\_end=2019&output\\_type=metric-tonnes](https://ozone.unep.org/countries/data-table?report_type=4&period_start=1986&period_end=2019&output_type=metric-tonnes)

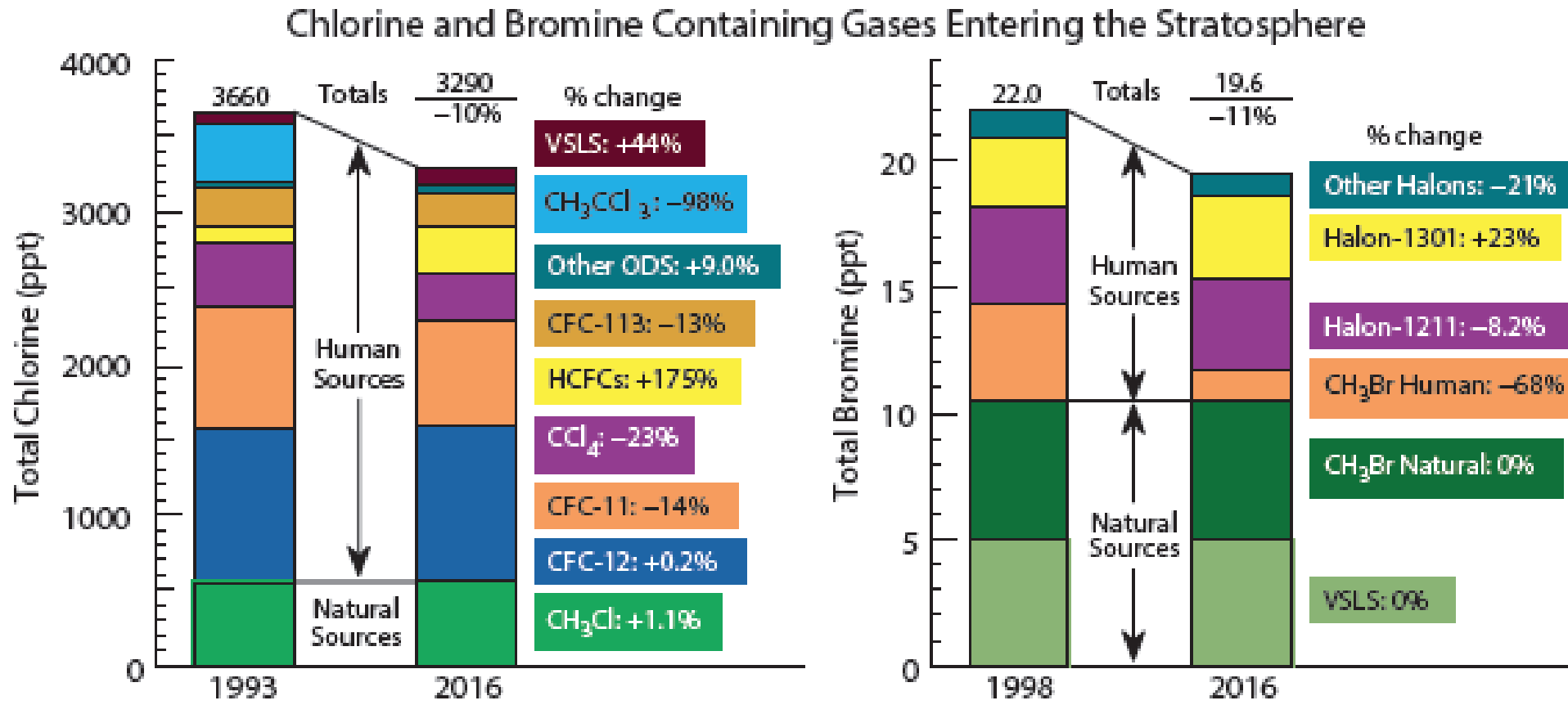
# Global situation regarding methyl bromide

- “The atmospheric abundance of CH<sub>3</sub>Br declined from a peak of **9.2 ppt** in 1996–1998 to **6.8 ppt** in 2016 as a consequence of controls under the Montreal Protocol. By 2016, controlled CH<sub>3</sub>Br consumption had declined by more than 98% from its peak value. Reported consumption in quarantine and pre-shipment (QPS) uses of CH<sub>3</sub>Br, which are not controlled under the Montreal Protocol, **has not changed substantially** over the last two decades. Total reported anthropogenic emissions (controlled and not-controlled) have declined by about 85% from the peak value, and atmospheric CH<sub>3</sub>Br abundance is now near the expected natural background.” (World Meteorological Organization 2018 Scientific Assessment of Ozone Depletion)

# Conclusions

- New Zealand's QPS emissions of methyl bromide (MeBr) have increased sharply in recent decades and years.
- Globally, consumption of MeBr has decreased considerably (due to phase-out of non-QPS uses), leading to a reduction of the abundance of MeBr.
- MeBr contributes to ozone depletion, a leading cause of recent climate change in the Southern Hemisphere.

# Impact of the Montreal Protocol on Ozone-Depleting Substances

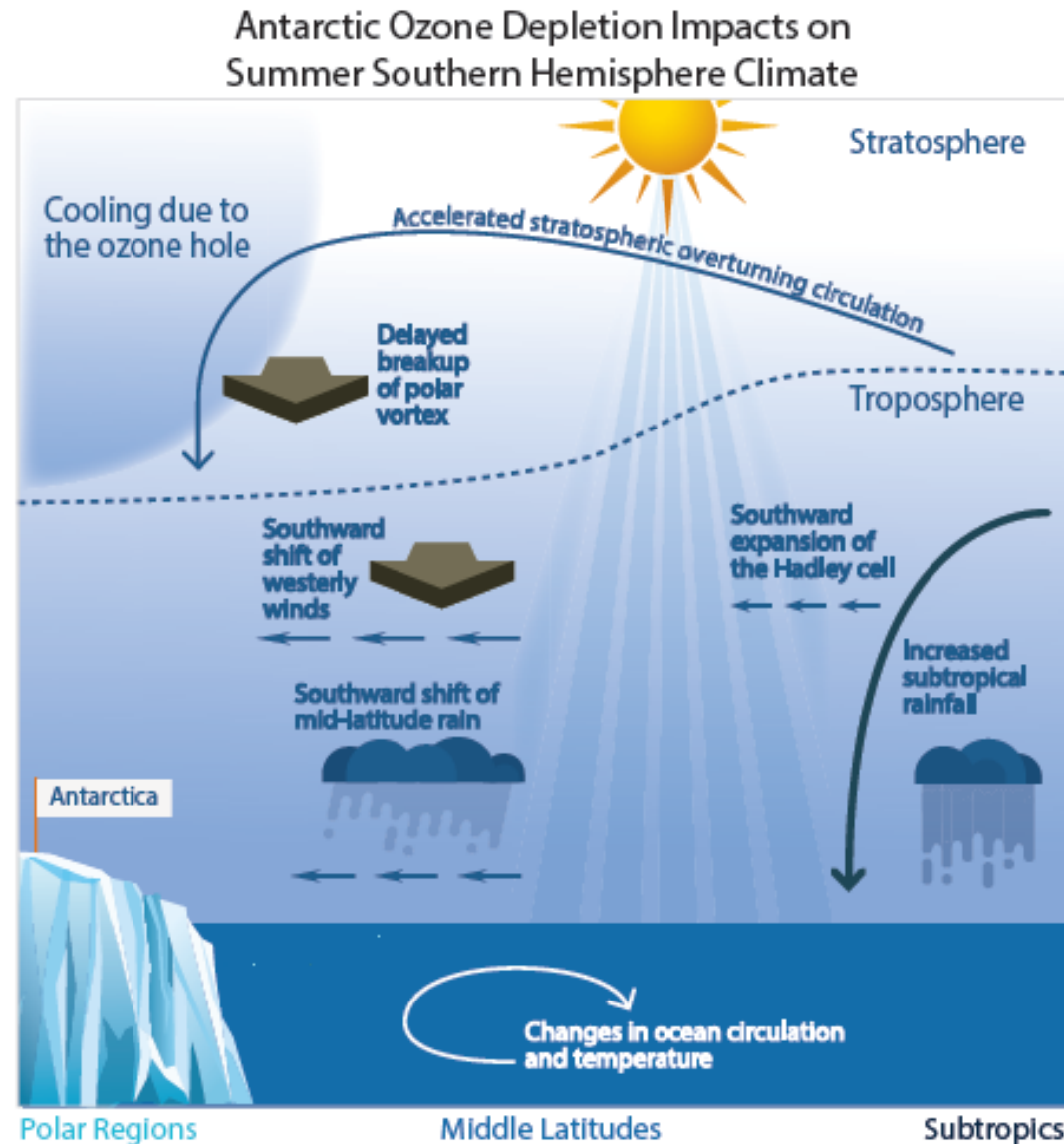


(WMO, 2018)

# Ozone depletion and climate change

Schematic depiction of the impact of man-made ozone depletion on climate in the Southern Hemisphere.

Note the southward shift of mid-latitude rain during summer tending to make regions to the north drier.



(WMO, 2018)