

## **What if we built a wall on top of the Greenland ice sheet? Can we “save” the Netherlands?**

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Current research suggests that in the long term, without serious mitigation of carbon emissions, the Greenland and Antarctic ice sheets will contribute to a rise of tens of metres to global mean sea level over the long term. For low-lying countries like the Netherlands and Denmark, as well as large coastal cities like London, New York and Shanghai, sea level rise of this magnitude would be disastrous.

Can we therefore geoengineer the ice sheets, the main sources of water, to stop this happening? What if we built a wall along the ice sheet in Greenland to accumulate more snow and balance out the accelerating melt on the margins? How big would the wall have to be? And what would happen downstream?

Much of Europe's regional sea level rise is likely to come from Antarctica where warm ocean water is melting and destabilizing ice shelves from below. What if we built an underwater dike to stop the warm water getting there? Could that save the Netherlands?

And just how much would all this cost anyway?

In this session we'd like to take a light-hearted (ish) look at the problem of sea level rise. We'll walk through why building a wall on Greenland might not help much, but why the Dutch should maybe use their centuries of expertise in holding back the sea to become a nation of underwater dyke builders.