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Two-metre Sea Level Rise 'Plausible' by 2100

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According to new projections, global sea levels could rise by two metres (6.5 feet) and displace tens of millions of people by the end of the century. It is double than the UN's Intergovernmental Panel on Climate Change (IPCC) benchmark estimates.

- A group of the world's leading ice scientists have released expert judgement on the situation, drawing on their own experience and observations.
 - They found it "plausible" that under the business-as-usual emissions scenario, sea-level rises could exceed two metres by 2100.
- The vast ice sheets of Greenland and Antarctica contain enough frozen water to lift the world's oceans dozens of metres. The expansion of water as oceans warm also contributes to sea level rise.
 - **Thermal expansion:** which is well-quantified, is currently the primary contributor to sea level rise and is expected to be the primary contributor over the course of the next century.
 - **Glacial contributions:** to sea-level rise are not less important rather it is more difficult to predict and quantify. Values for predicted sea level rise over the course of the next century typically range from 90 to 880 mm, with a central value of 480 mm.
- **IPCC in its fifth assessment report:** said that under current emissions trajectories would likely rise by up to one metre by 2100.
 - That prediction has since been viewed as conservative, as the levels of planet-warming greenhouse gas emissions continue to rise year on year, and satellites showing accelerated rates of melt-off from massive ice sheets atop Antarctica and Greenland.
- **Consequences:** of a sea-level rise of this magnitude would clearly have profound consequences for humanity.
 - Around 1.79 million square kilometres of land could be lost and up to 187 million people displaced. Many small island states, particularly those in the Pacific, will effectively be pretty much inhabitable.

- **Efforts of Governments:**

- The Paris climate deal, struck between nations in 2015, aims to limit global temperature rises to well below two degrees Celsius (3.6 Fahrenheit) and encourages countries to work towards a 1.5 degrees Celsius cap.
- IPCC released a landmark climate report that called for a drastic and immediate drawdown in coal, oil and gas consumption in order to arrest the rapid rise in the levels of greenhouse gases in the atmosphere.