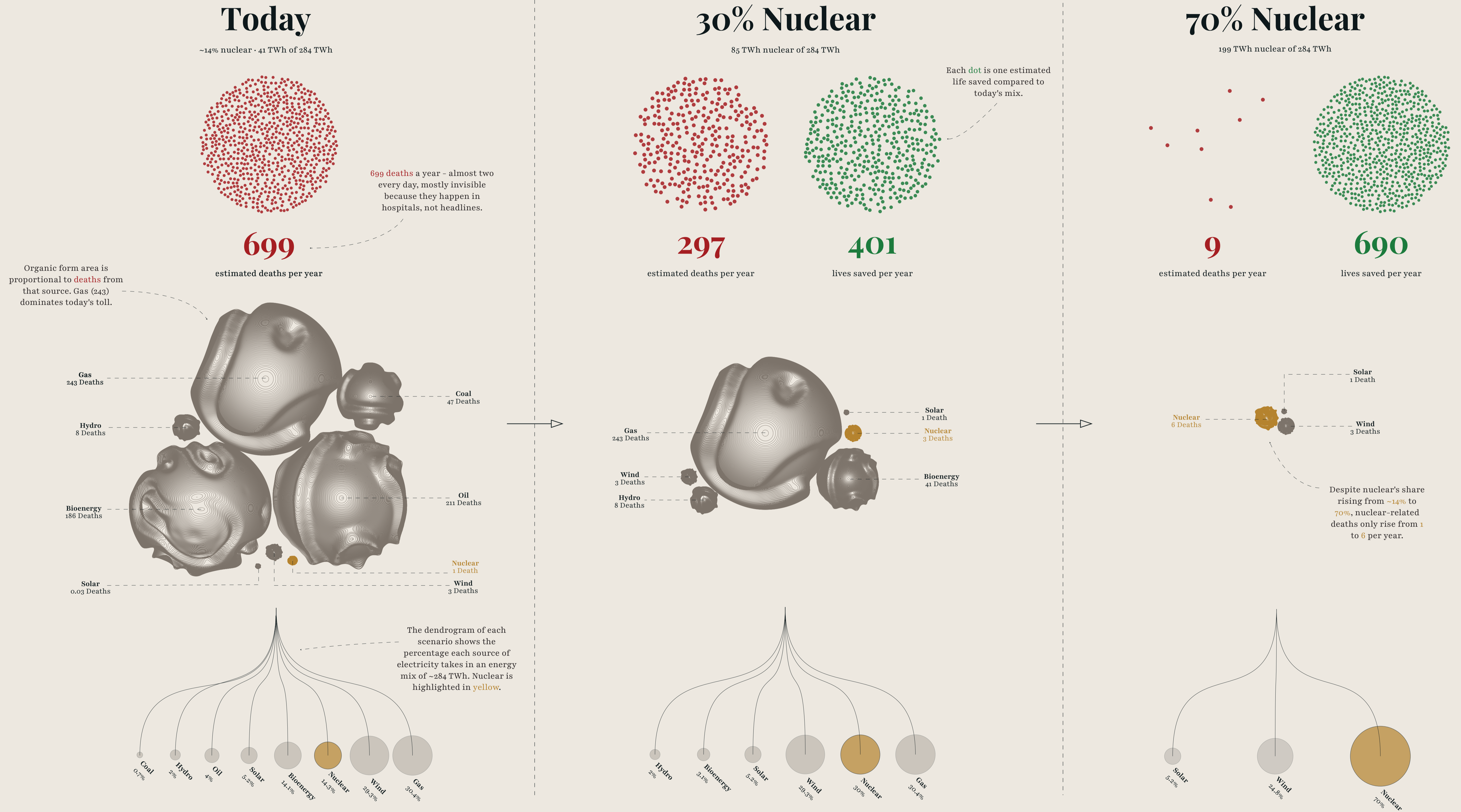


The Lives We Could Save

What happens to the mortality rate if you take the same demand for electricity and apply 3 energy mix scenarios for the grid



Most people picture nuclear deaths as Chernobyl. Most people don't picture the deaths their everyday electricity already produces - through air pollution, through supply-chain accidents, through the slow public-health cost of burning fuel at industrial scale. The UK grid kills an estimated 699 people every year. Almost all of them die from sources nobody worries about. The visualisation below holds total demand constant and asks: if more of that grid were nuclear, what changes? The answer is uncomfortable for both sides of the argument.

Legend

- Top: dot circles. Each red dot is one death; each green dot is one life saved versus today's mix.
- Middle: organic forms; volume is proportional to estimated annual premature deaths.
- Bottom: a dendrogram of the electricity mix; circle size is each source's share of the mix in TWh.

Methodology

Modelled scenarios at constant 284 TWh demand. Death rates per TWh from Markandya & Wilkinson (2007) and Sovacool et al. (2016) - counterfactual estimates, not predictions. nuclear figures include Chernobyl and Fukushima distributed across European generation.