

Energy Security and Orderly Transitions On Time and Expectations



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The Planning Fallacy & Behavioral Economics

Douglas Hofstadter's Law (1979):

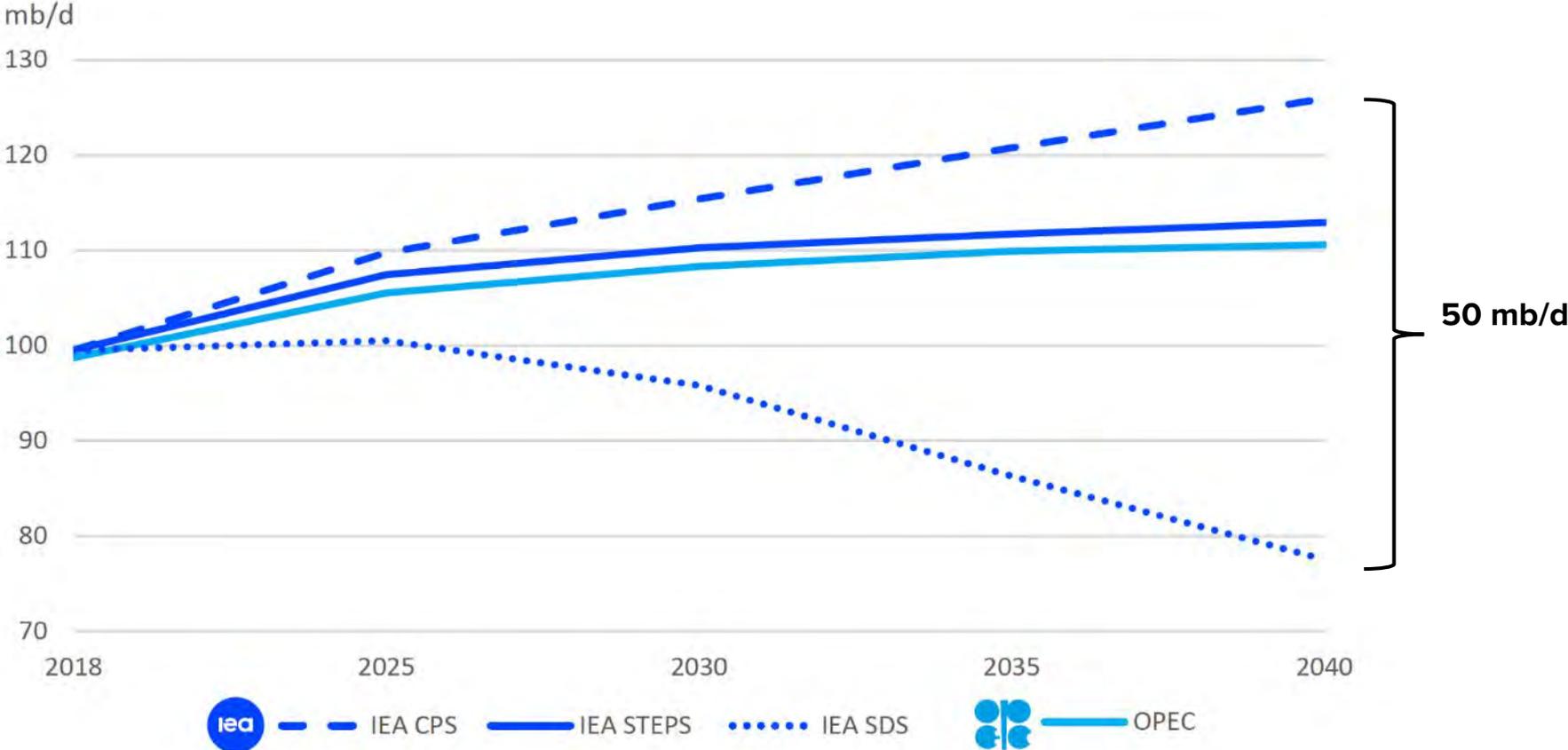
“It always takes longer than you expect, even when you take into account Hofstadter's Law”

Daniel Kahneman and Amos Tversky (1979)

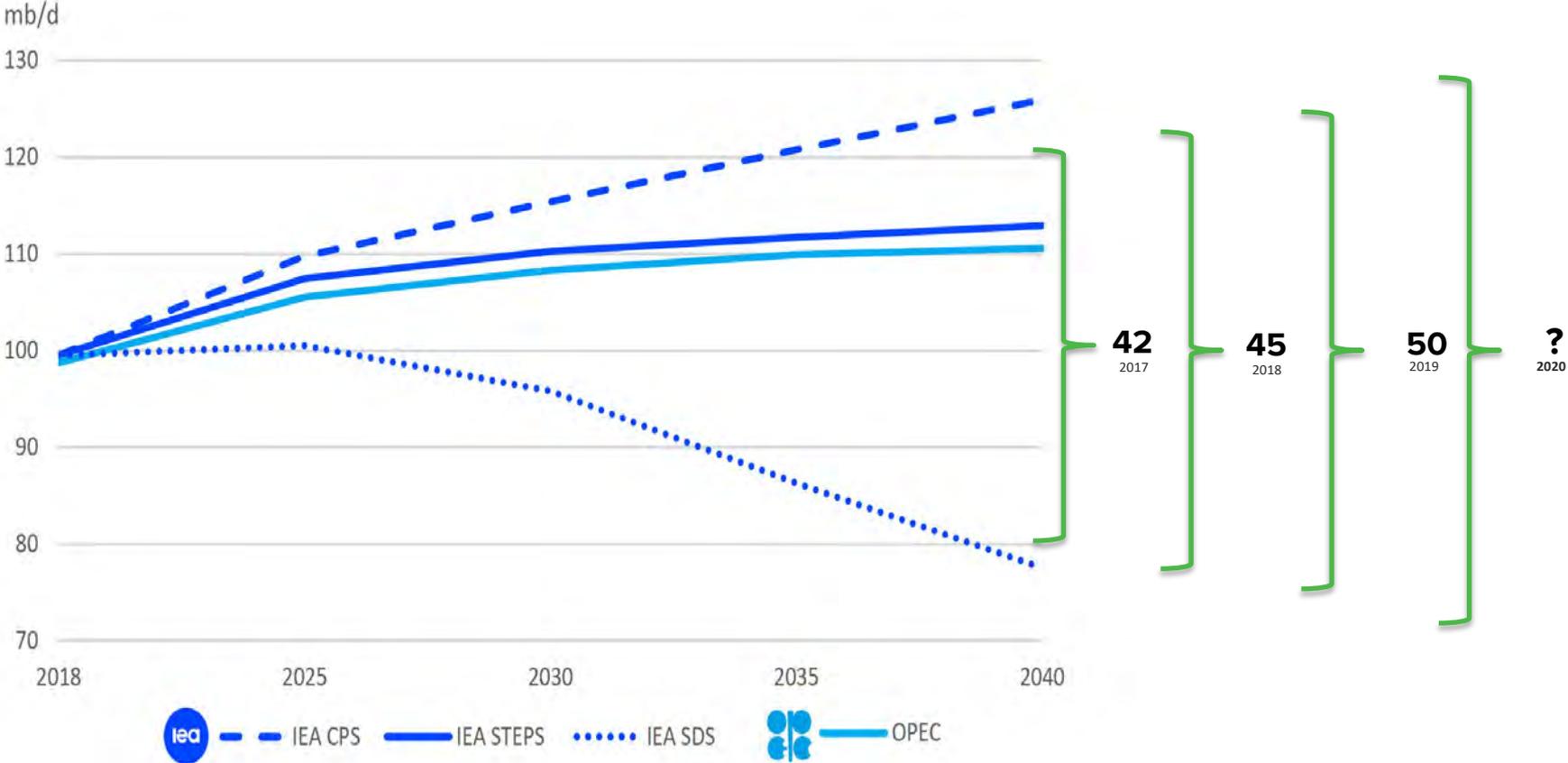
“projections on how much time will be needed to complete a future task display an optimism bias and underestimate the time needed”

Projections vary by 50 mb/d, representing a widening gap between “business-as-usual” and ambitious climate goals

World Liquids Demand in Various Scenarios



Past trends and behavioral economics predict the gap will widen in future.



Key Messages

Long-term decline rates in oil demand growth may well be overstated

- Over time scenarios show that **the gap will likely widen**

Energy transitions and additions

- The stellar rise of renewables is widely supported but does not change **reliance on hydrocarbons**

Technology and innovation hold great promise, but pathways always take longer

- Synergies between sectors can accelerate transitions to **climate compliance and affordable access**

Widen the solution space

- Technology neutral dialogue on **whole systems solutions create a more predictable investment environment for renewables integration, net zero emissions, and circular carbon models**

Reduce barriers to stimulate technology transfer, trade, and investment

- To advance technologies to **the scale energy security, and sustainable development goals require.**

Energy security and orderly transitions also depend on the policy perceptions projections create

- Which metrics do we measure? More emphasis may be placed on **adaptation**



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