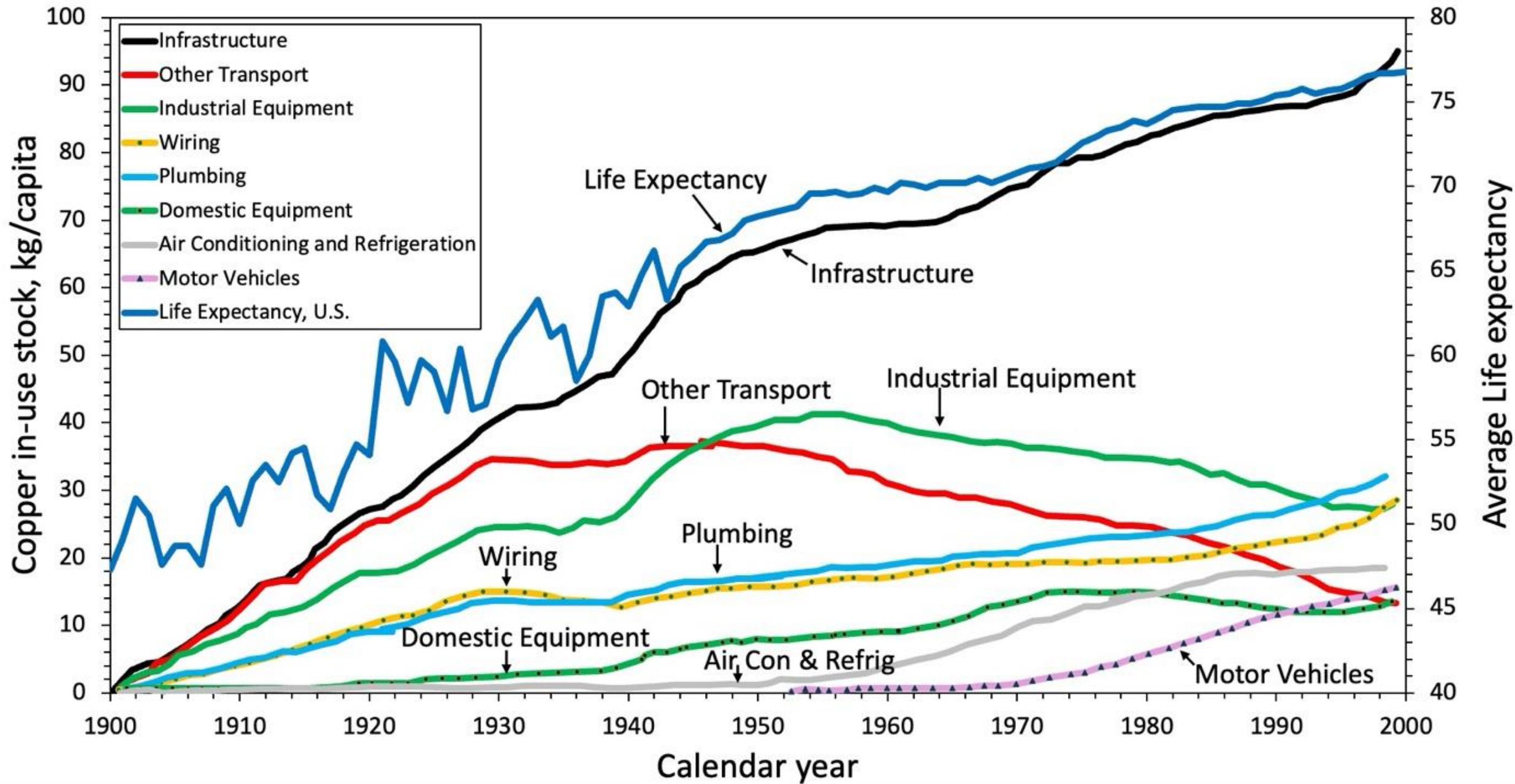


# Copper

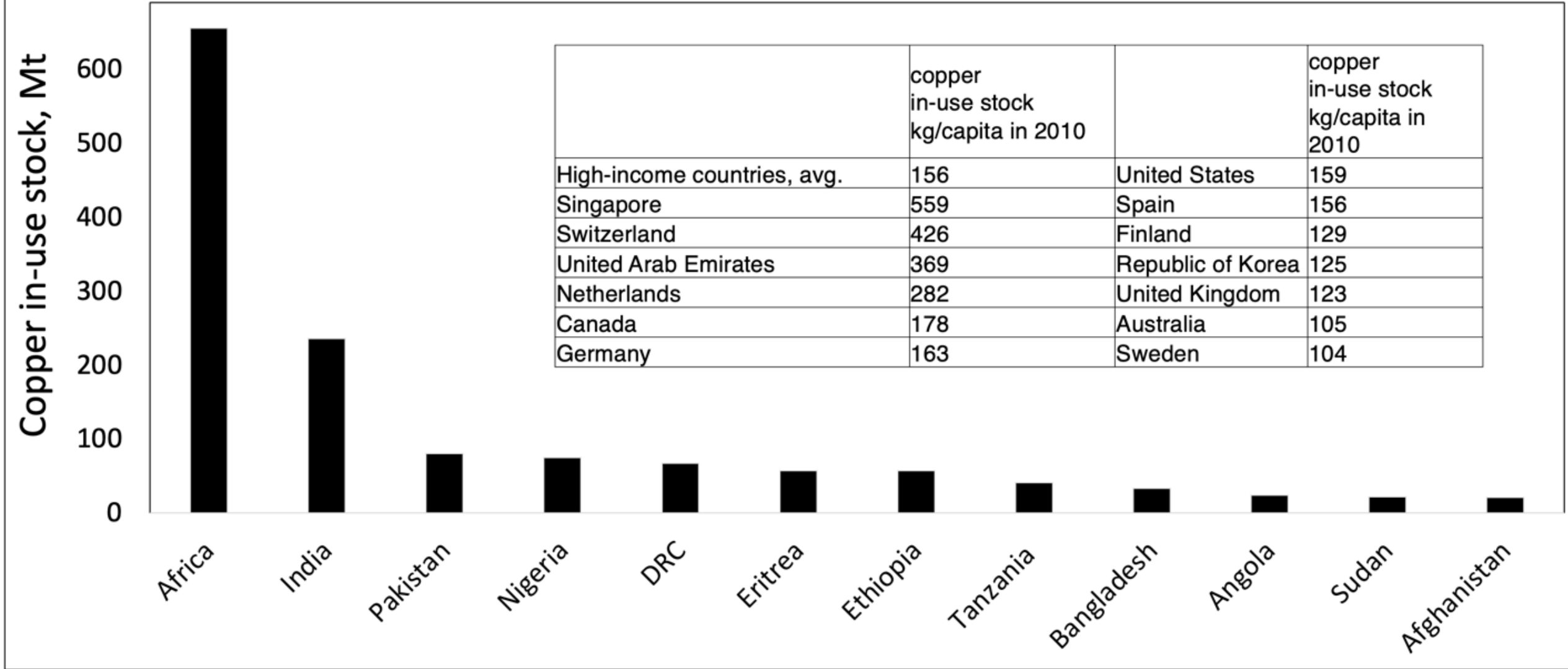
Adam C. Simon



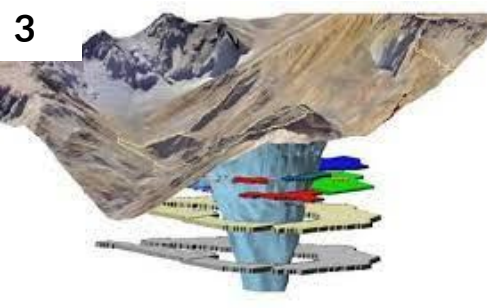
# Copper In-Use-Stock by Infrastructure Category and Life Expectancy, United States



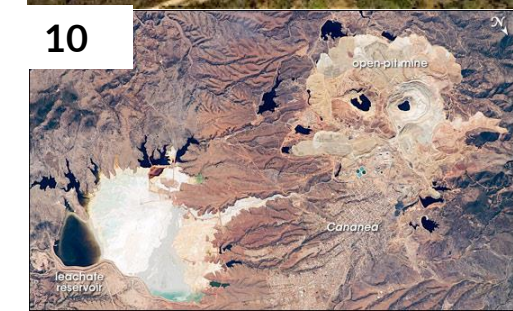
# Copper Required for Infrastructure Parity with High-Income Countries



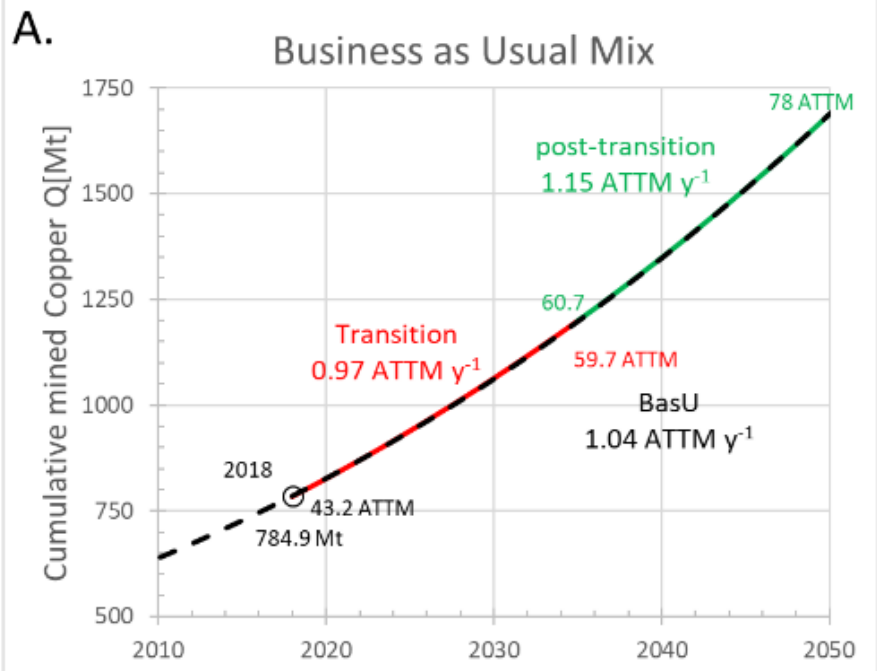
# Top 10 copper mines, Mt/yr

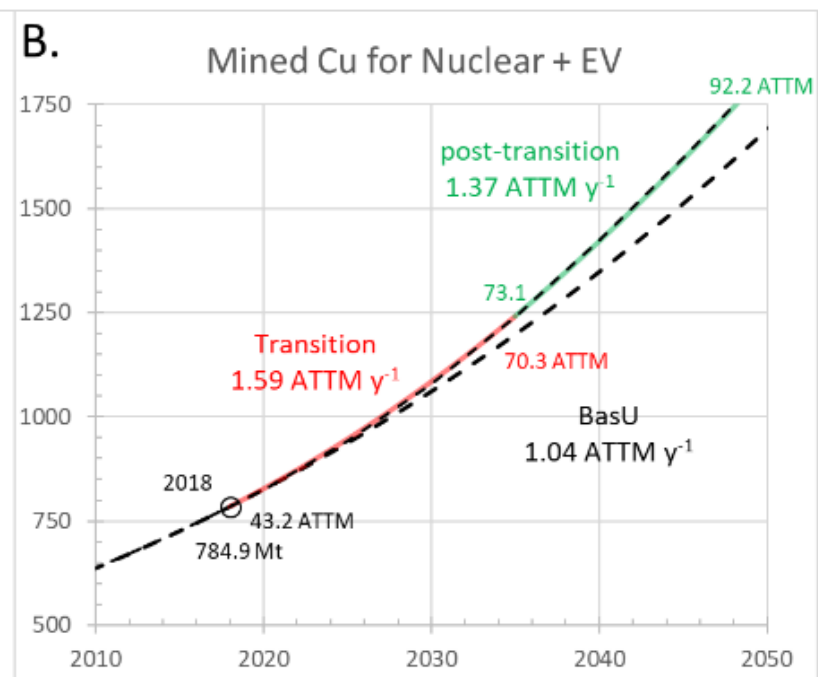
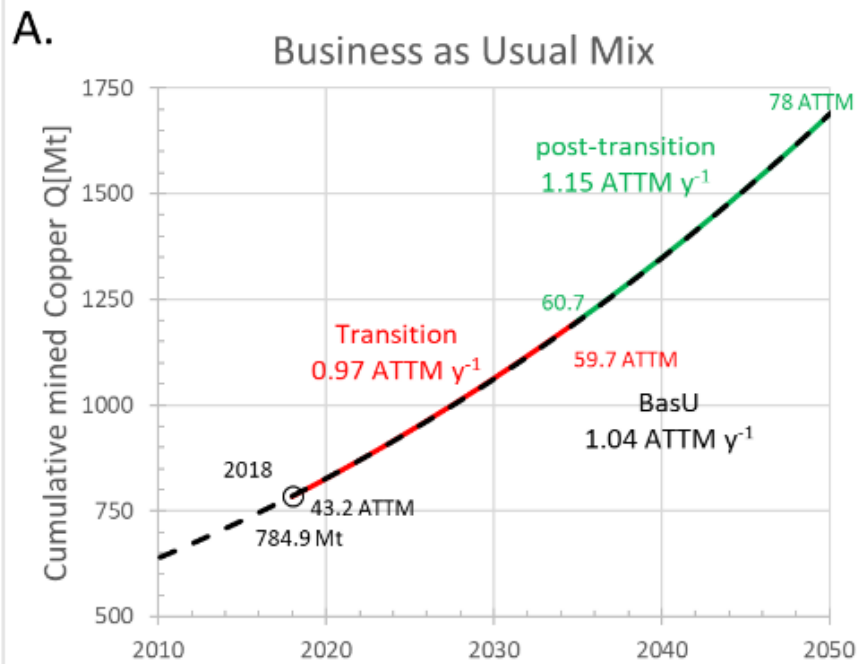


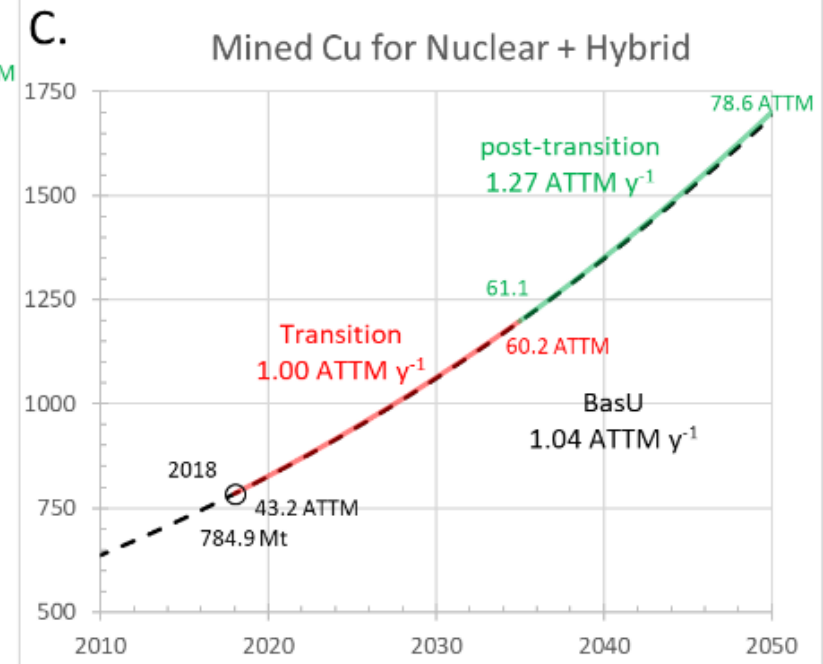
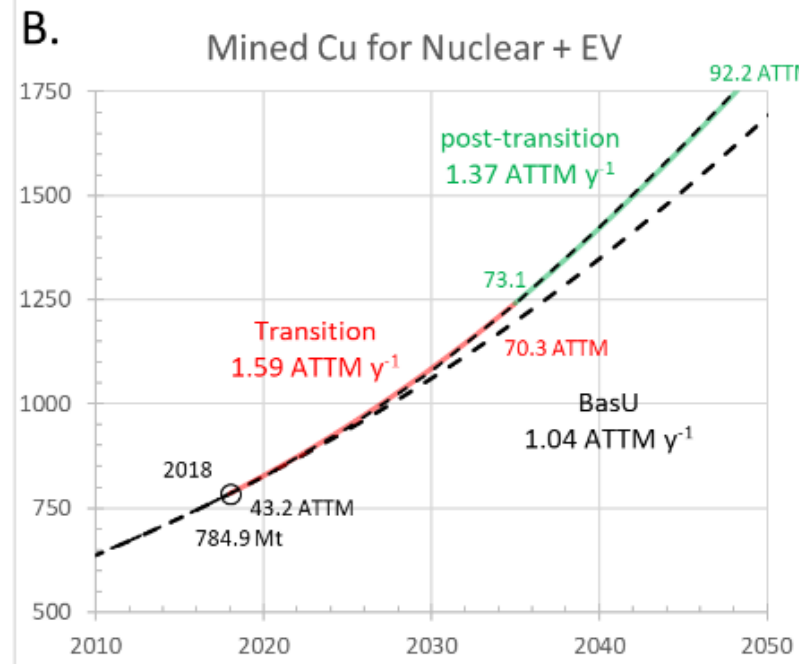
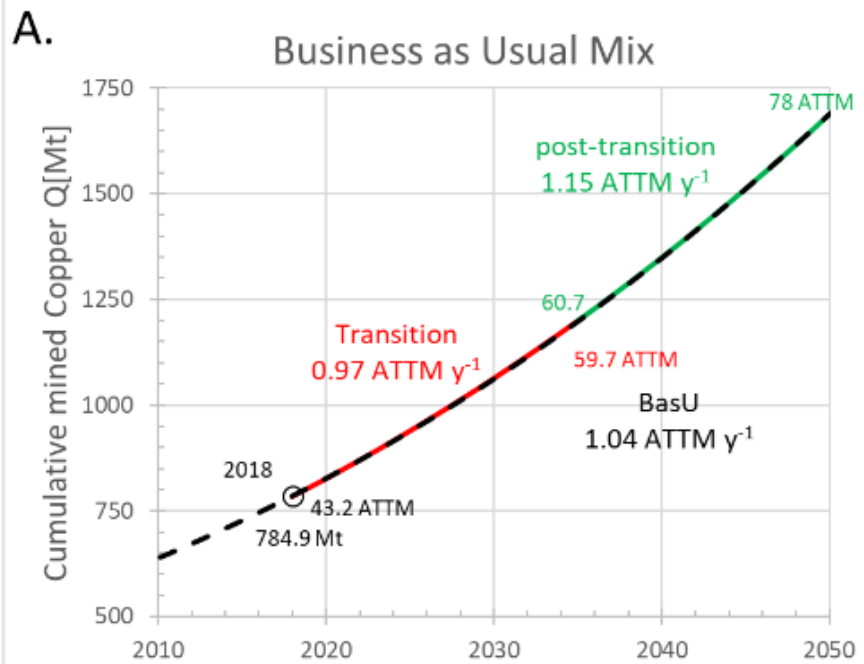
	2022
Escondida (Chile)	1.060
Collahuasi (Chile)	0.589
El Teniente (Chile)	0.456
Cerro Verde (Peru)	0.434
Morenci (USA)	0.401
Grasberg Block Cave (Indonesia)	0.396
Chuquibambilla (Chile)	0.373
Cobre Panama (Panama)	0.345
Kamoa-Kakula (DRC)	0.334
Buenavista del Cobre (Mexico)	0.332
<b>TOTAL</b>	<b>4.719</b>



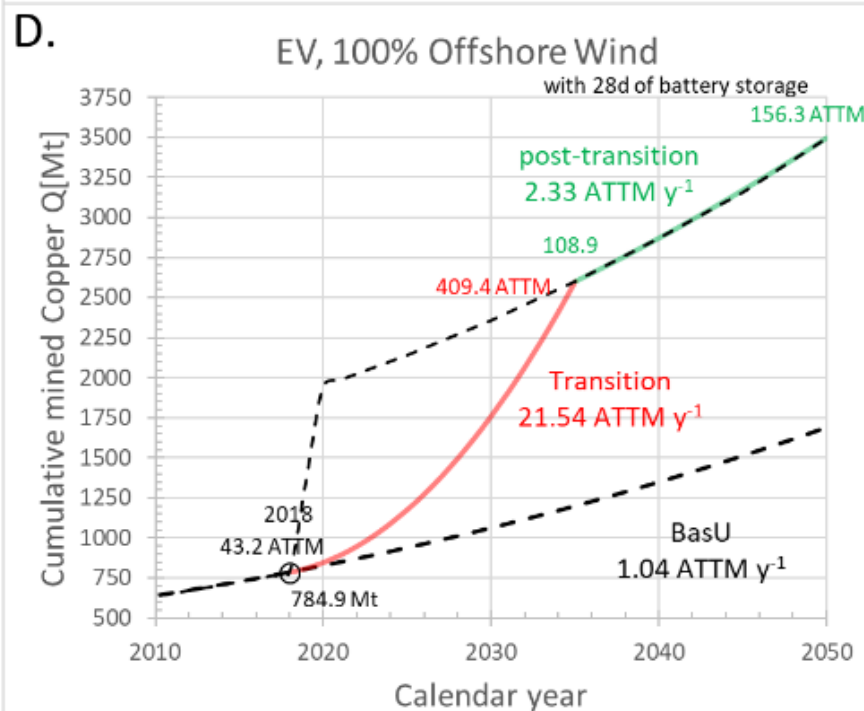
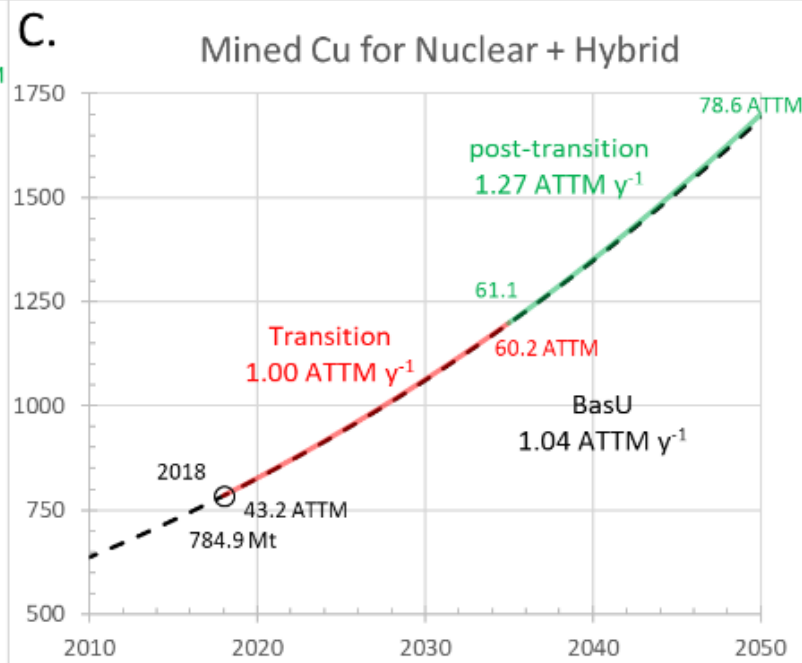
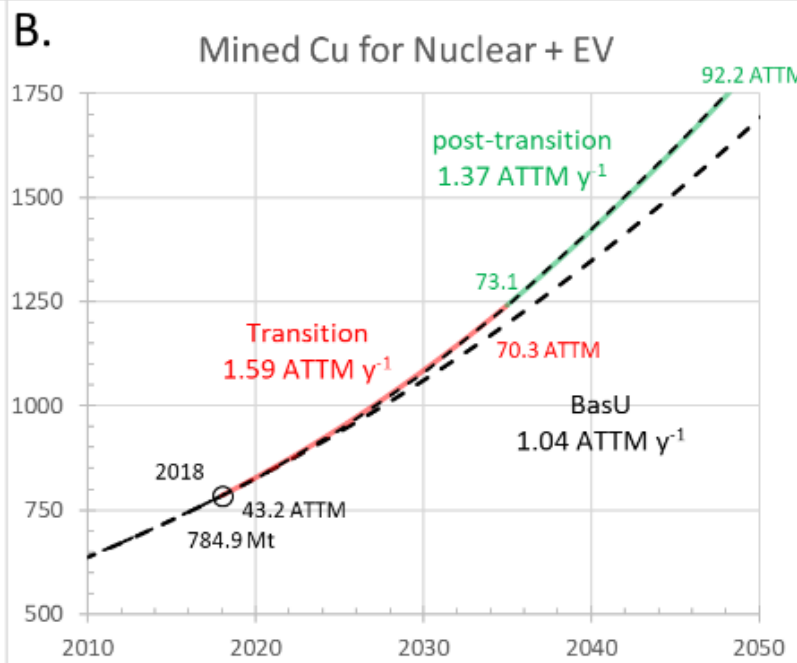
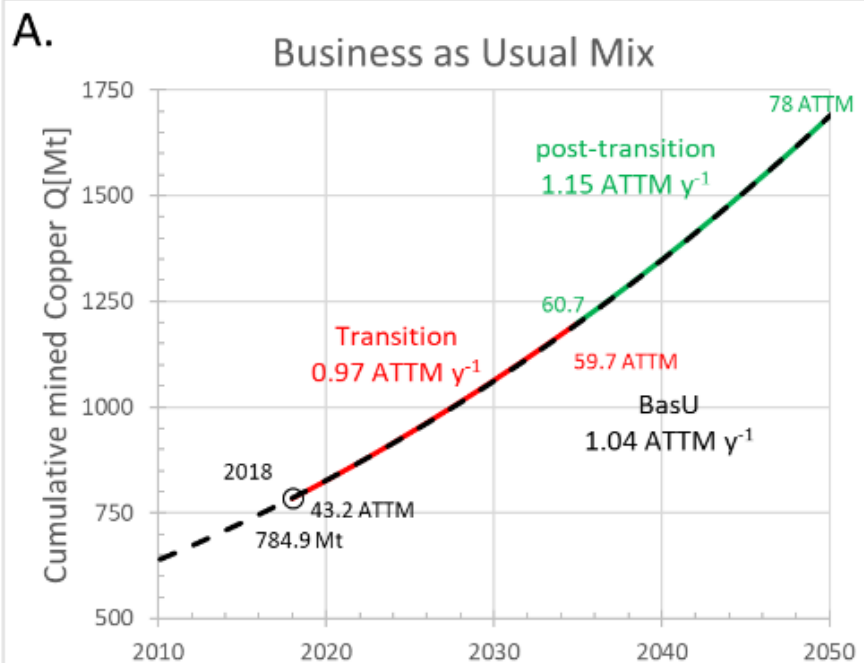
The mining contribution came from 709 mines. The top ten producing mines contributed 21% of this production at an average of 0.47 Mtpy each, for a total contribution of 4.72 Mtpy.

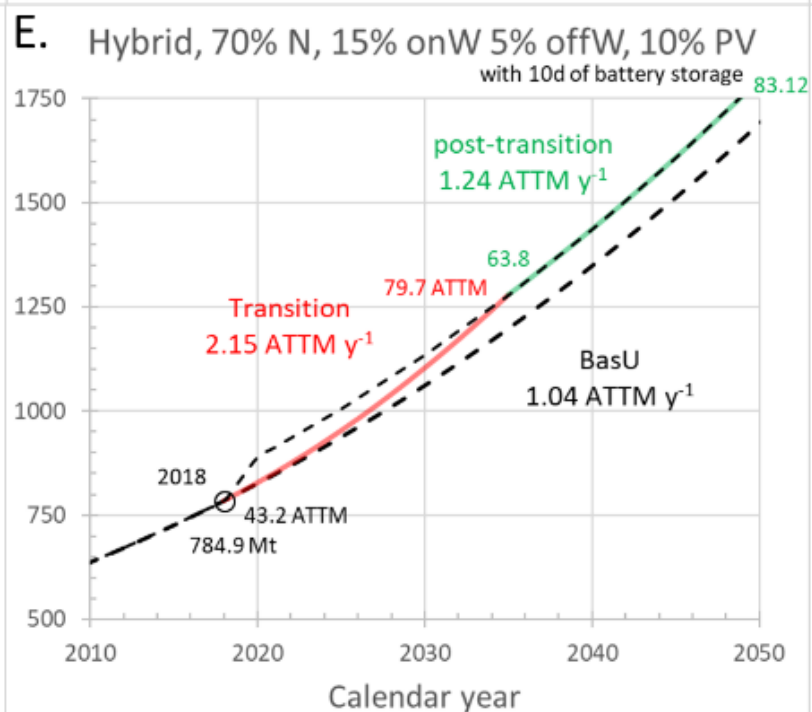
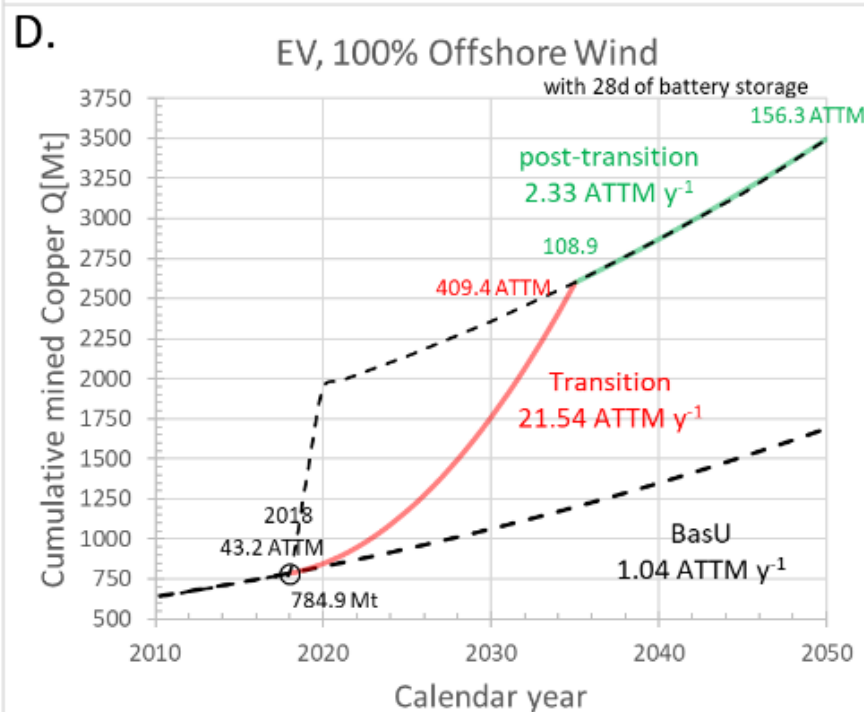
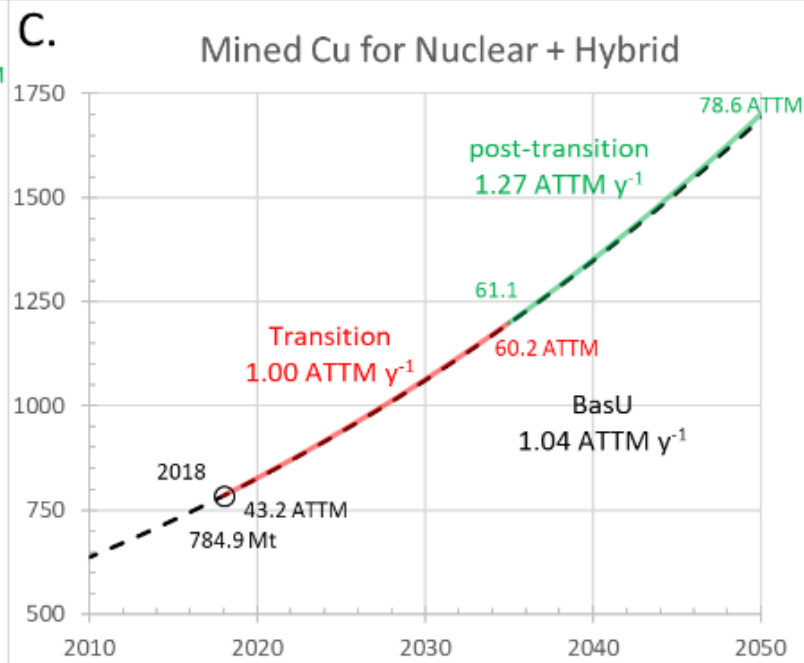
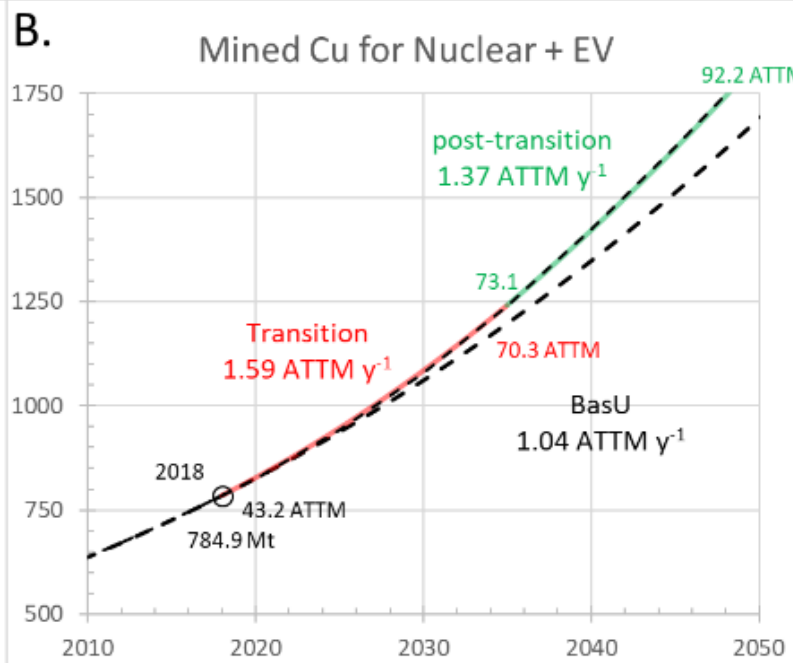
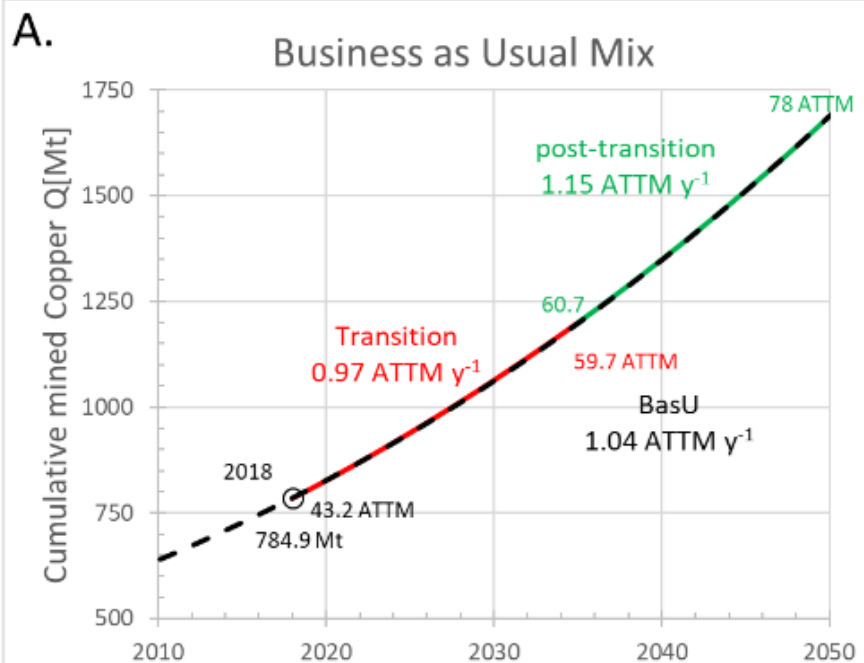


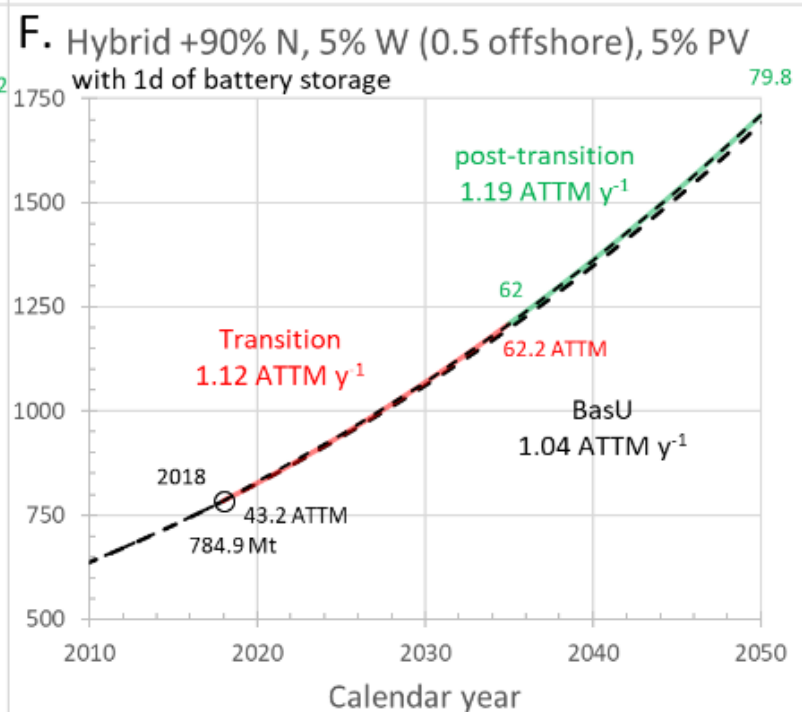
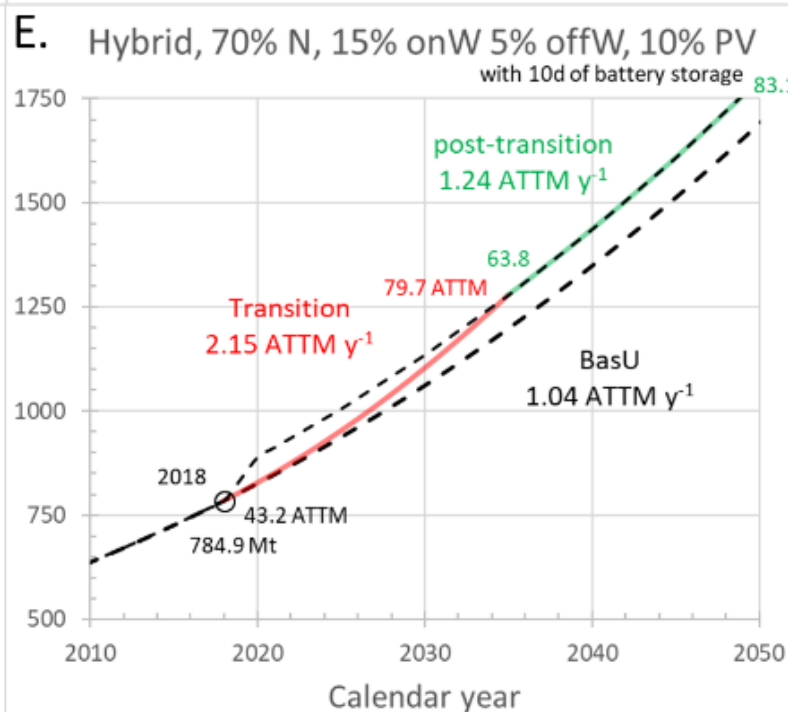
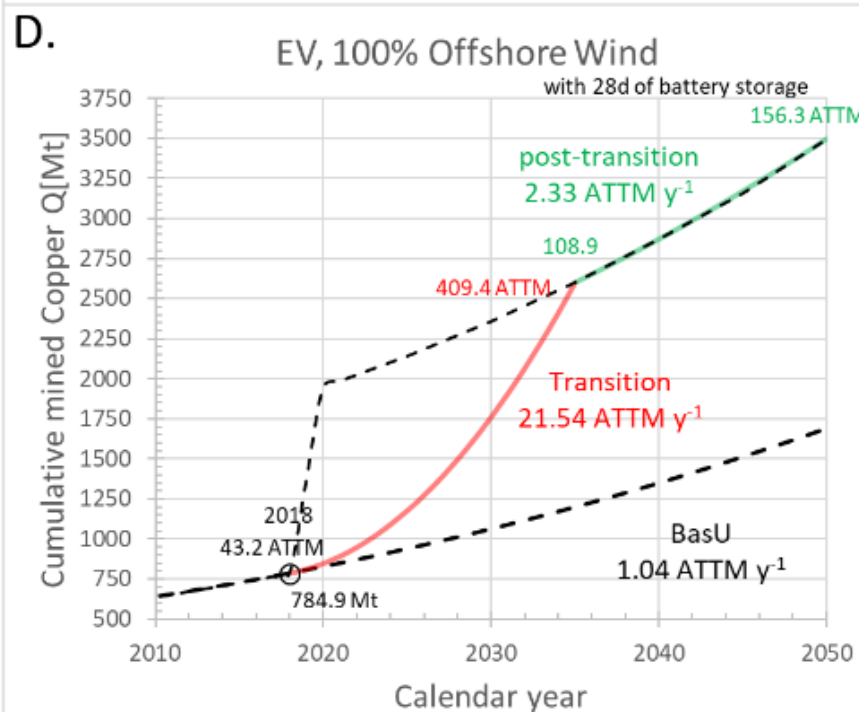
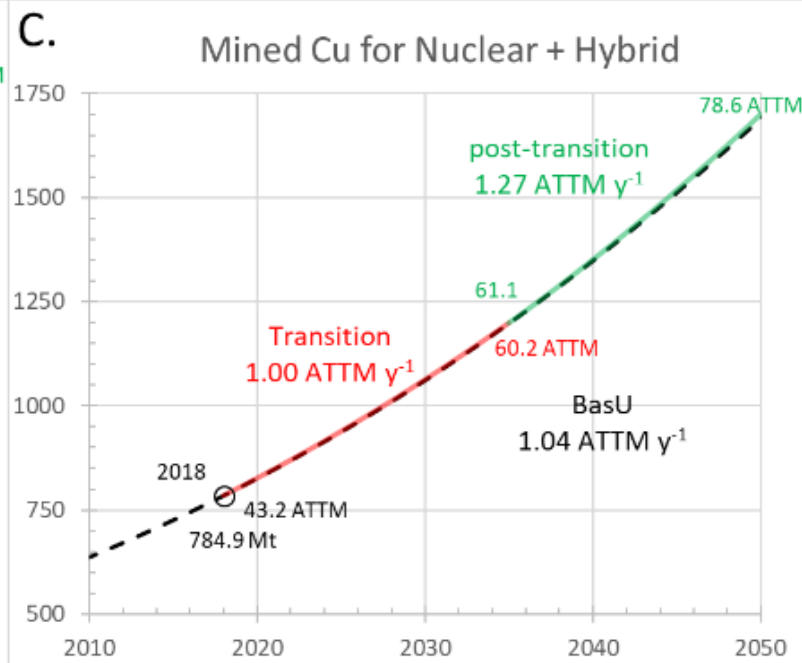
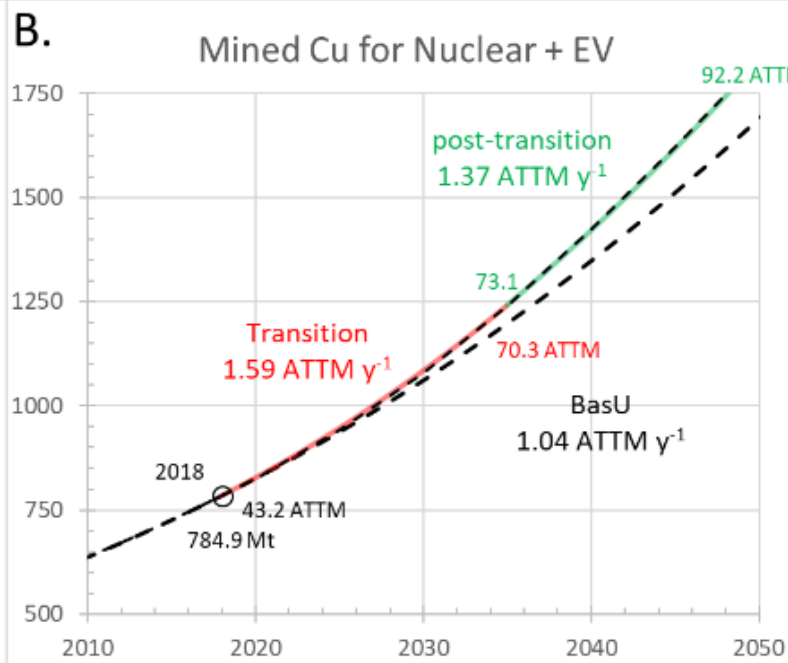
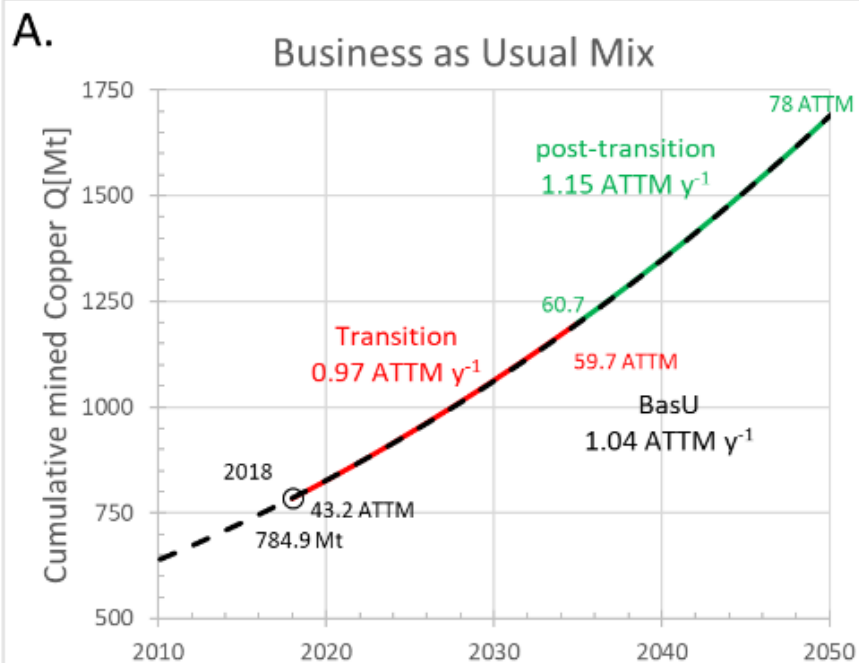








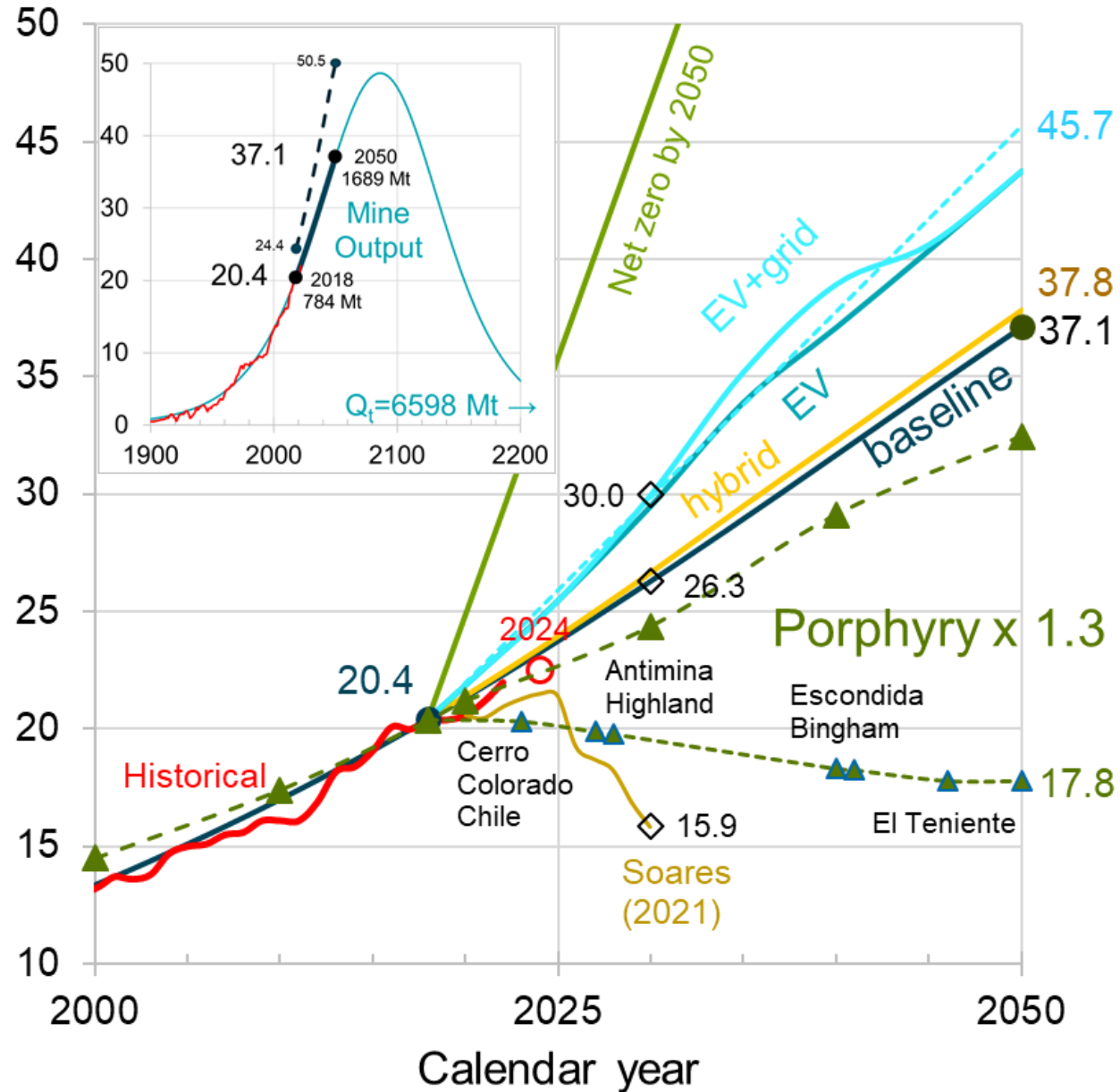




# Mining Rates for Global EV Fleet

10<sup>6</sup> tonnes Cu/year

↑91.7



BHP reported that 10 brownfield copper projects developed in Latin America between 2020 and 2024 had a 2024 capital intensity of US\$23,000 tonne.

The capital intensity of the top-40 undeveloped copper prospects in the world in 2012 had an estimated 2024 capital intensity of US\$20,527 .