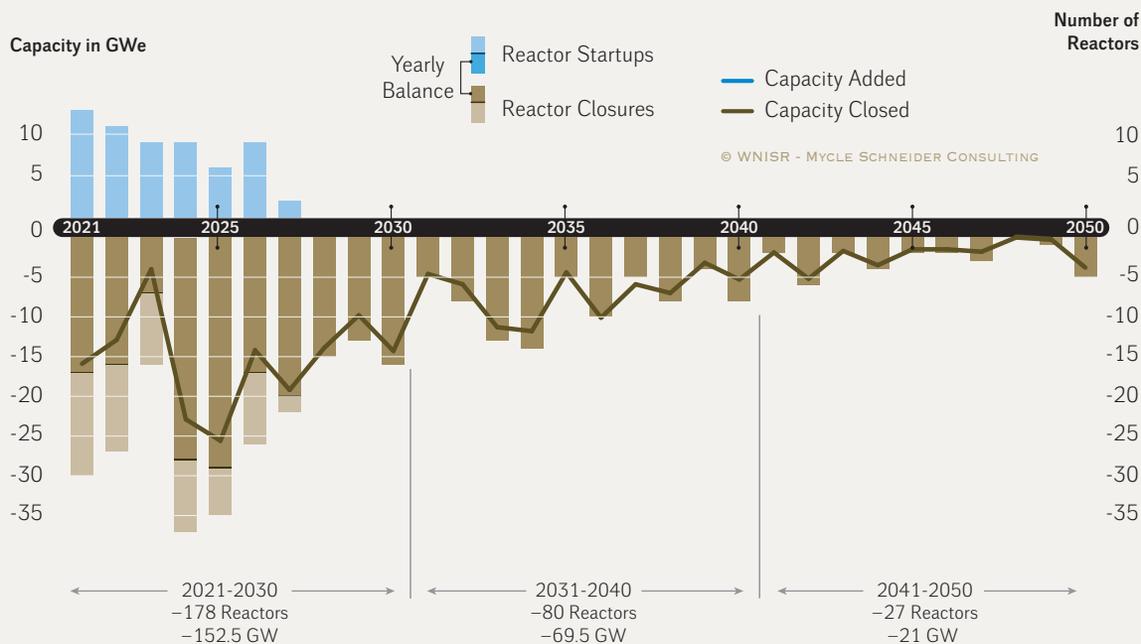


Figure 17 · The 40-Year Lifetime Projection

Projection 2021–2050 of Nuclear Reactors/Capacity in the World

General assumption of 40-year mean lifetime

Operating and Under Construction as of 1 July 2021, in GWe and Units



Sources: Various sources, compiled by WNISR, 2021

Notes pertaining to [Figure 17](#), [Figure 18](#) and [Figure 19](#).

Those figures include one Japanese reactor (Shimane) and two Chinese 1400 MW-units at Shidao Bay, for which the startup dates were arbitrarily set to 2025 and 2024, as there are no official dates.

The restart of two reactors (Mihama-3 and CEFR) from LTO prior to 7/2021 appears as “startup”. Potential restarts or closures amongst the 26 reactors in LTO as of 1 July 2021 are not represented here.

The figures take into account “early retirements” of three reactors in the U.S.; the early retirement as of 2021 for four Exelon reactors recently announced to close in September and November of this year, is not taken into account due to uncertainties; in the case of four additional reactors, the reversal of early retirements has been maintained although some are likely to be repealed, and others might be added (see [United States Focus](#)); the figures also take into account political decisions to close reactors prior to 40 years (Germany, South-Korea).

In the case of reactors that have reached 40 years of operation prior to 2021, the 40-Year projection also uses the end of their licensed lifetime (including 6 reactors licensed for 80 years in the U.S.)

In the case of French reactors that have reached 40 years of operation prior to 2021 (startup before 1981), we use the deadline for their 4th periodic safety review (visite décennale) as closing date in the 40-year projection. For all those that have already passed their 3rd periodic safety review, the scheduled date of their 4th periodic safety review is used in the PLEX projection, regardless of their startup date.