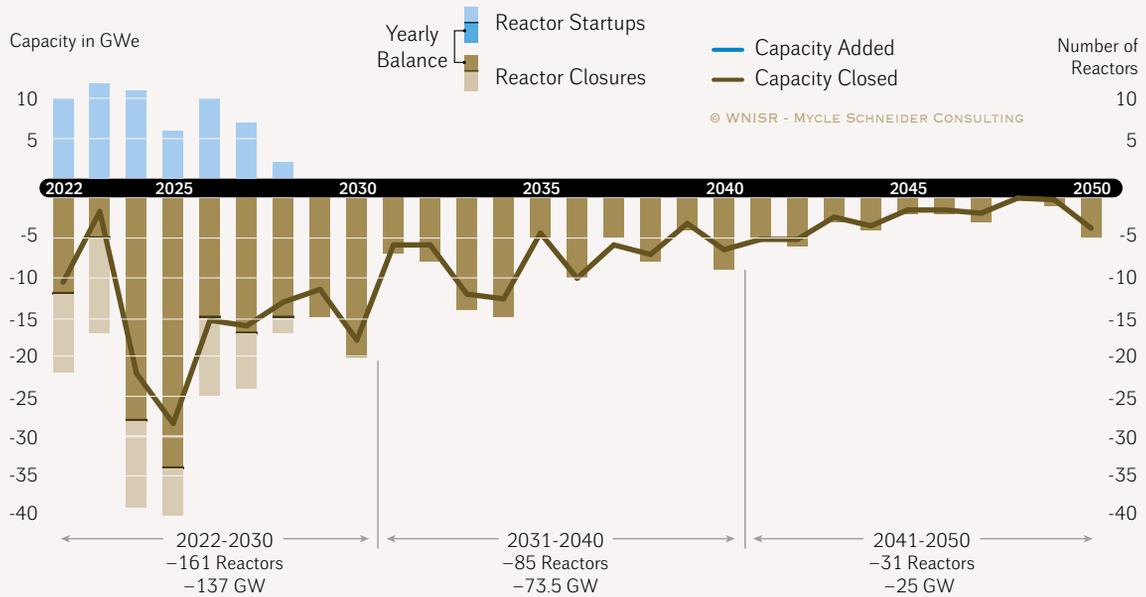


Figure 19 - The 40-Year Lifetime Projection

Projection 2022–2050 of Nuclear Reactors/Capacity in the World

General assumption of 40-year mean lifetime

Operating and Under Construction as of 1 July 2022, in GWe and Units



Sources: Various sources, compiled by WNISR, 2022

Notes pertaining to Figure 19, Figure 20 and Figure 21:

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.

Restarts or closures amongst the 29 reactors in LTO as of 1 July 2022 are not represented here although at least two Canadian reactors that are in LTO are set to be restarted, and thus later closed as well.

The figures also take into account current political decisions or legally binding obligations as of end of August 2022 to close reactors prior to 40 years (Germany, South-Korea). These decisions are under discussions in both countries and might be reversed after the editorial deadline of WNISR2022, as it is the case in Belgium, with discussions on a ten-year lifetime extension for two reactors.

In the case of reactors that have reached 40 years of operation prior to 2022, the 40-year projection also uses the end of their licensed lifetime (including reactors licensed for 80 years in the U.S.).

In the case of French reactors that have reached 40 years of operation prior to 2022 (startup before 1982), we use the deadline for their 4th periodic safety review (visite décennale) as closing date in the 40-year projection. In case this deadline is or will be passed by the end of 2022 (9 reactors), we use a 10-year extension, although no licensing procedure has been completed for this extension. For all those that have already passed their 3rd periodic safety review, the scheduled date of their 4th periodic safety review (or 10-year extension for the cases previously mentioned) is used in the PLEX projection, regardless of their startup date.