**High Consumption scenario description:**

This scenario is a portmanteau scenario which combines the High Ownership and High Usage scenarios of PIER 1.5, but adapted to PIER 2.0.

For High Ownership

* Appliance ownership penetration (including modern fuel cooking penetration) values are chosen to be higher than in the default case. This is done by increasing the growth-rate of appliance penetration and/or the GSDP elasticity of appliance penetration.
* In addition, since AC and cooler penetrations are calculated from a joint projection of AC+cooler penetration, the share of ACs in that mix is increased compared to the default.
* The number of ACs and fans owned by a household is increased compared to the default. This is done by increasing the growth rate used in the default case for the number of instances of these appliances.

For High Usage

* For cooling appliances (fans, ACs and coolers), the usage of these appliances is increased by reducing (compared to the default case) the ‘trigger temperature’ (the temperature at which they are switched on) by 2 C.
* Moreover, there is a change in the energy service demand related inputs for cooling appliances also due to the change in the number of appliances owned/used.
* For lighting and TV, usage is increased by half an hour to an hour in some seasons and hours.

Other changes

* Because the number of appliances used in a year changes (due to increased penetrations and increased number of instances per consumer), all other inputs that depend on this (e.g. EfficiencySplitLevel, TechSplitRatio and ST\_SEC) also change, though the methodology to compute them is the same as in the Likely Efficiency Trend scenario.
* Since high ownership and high usage could also mean greater ownership and usage of unmodelled appliances, the exogenous input corresponding to OtherResElec demand is also increased. This is done by increasing the growth rate of this exogenous input compared to the default case by 15%.

Note that all the above changes are only effective FY25 since the model is identical across all scenarios up to FY24. So, source files need to be changed carefully accordingly.

**Scenario specific source data files:**

* D\_RES UsagePenetration.xlsx
* NumInstances.xlsx
* Res-ST-stock-flow-TSR-ELS.xlsx
* Res-ST-SEC.xlsx
* ReferenceTemperatures.xlsx
* Res-non-cooling-service-demand.xlsx
* Res-cooling-service-demand (1-Load-shifting).xlsx
* Res-cooling-service-demand (2-Parameter prep).xlsx
* OtherResElecDemand.xlsx