Energy intensity of industry

In the 2050 Calculator the industrial sector's future energy use is determined by two factors: industry energy intensity (including fuel mix; described here) and output growth (described on another page).

In 2012, we estimate 72% of Wellington industry was fuelled by electricity, 4% by liquid hydrocarbons, and 24% by gaseous hydrocarbons.

Nationally, energy intensity (measured as energy consumed per dollar of real GDP) has improved at an average rate of 1% per year since 1990.

Level 1

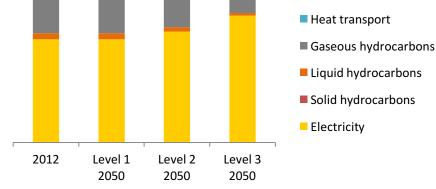
Level 1 assumes that energy intensity improves by 1.0% per year, and that the fuel mix remains the same as today.

Level 2

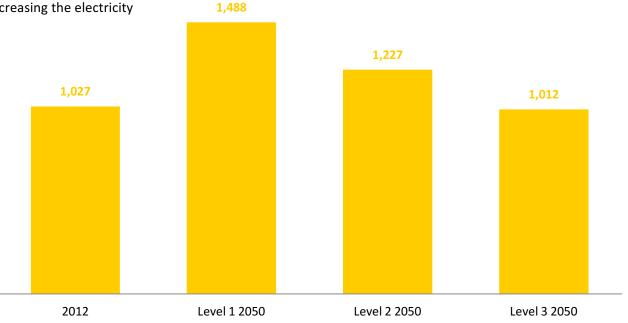
Level 2 assumes that energy intensity improves by 1.5% per year. There is some substitution of electricity for gaseous and liquid hydrocarbons, increasing the electricity share to 77%.

Level 3

At level 3 energy intensity improves by 2.0% per year. There is considerable substitution of electricity for gas and LPG/diesel, increasing the electricity share to 88%.



Proportion of energy demand by fuel



Industrial energy demand (GWh/yr) assuming Trajectory A on output growth