

Energy Demand for Tractors

Level 1

In level 1 there is no further improvement in efficiency of tractors. Diesel usage remains at 4.5 liters per hour. Total diesel demand reaches to 3.8 TWh by 2050 from 0.4 TWh in 2015.

Level 2

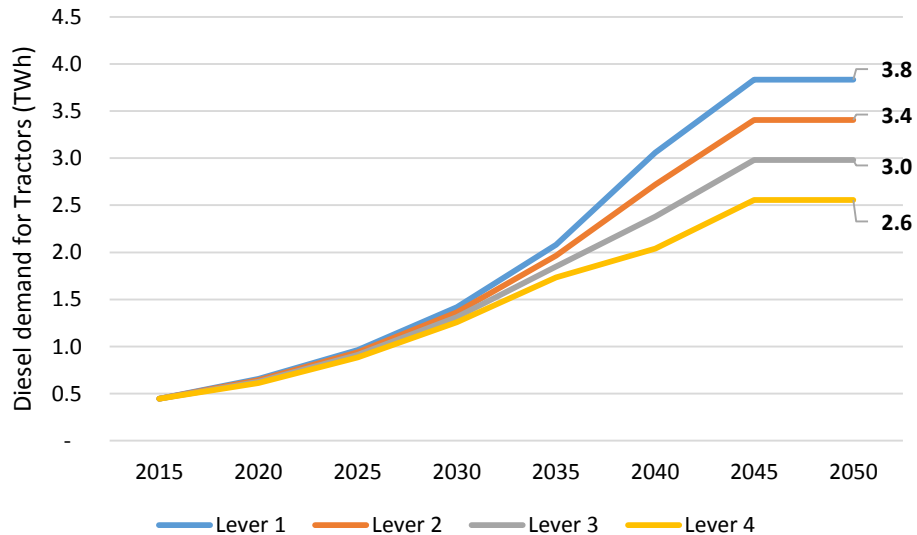
There is slight improvement in efficiency of tractors. The demand for diesel reaches saturation at 3.4 TWh. The specific energy consumption reduces to 4 liters per hour from 2035 onwards.

Level 3

Level 3 assumes that specific energy consumption will further reduce due to various measures taken by policy makers, like more stringent standards will be in place to improve the specific energy consumption in tractors. The diesel demand grows to 3.0 TWh by 2045 and remain same thereafter.

Level 4

Suitable policy measures for improving specific energy consumption will be in place. This will include policies like new standards to restrict sales of inefficient tractors and deregulation on diesel prices for agriculture sector. The Diesel demand grows to 2.6 TWh by 2045 and remains same.



Total number of tractors in the state was about 34 thousand in 2015 and it has doubled between the period 2010-2015. Given the government's focus on improving farm productivity and the fact that only 12% of potential market has been captured till now, this trend is expected to continue. This means that complete farm mechanization will reach by 2045 and penetration of tractor will reach to its full potential by then. Total annual demand for diesel from tractors is estimated to be about 0.03 million tons (MT) in 2015.