

According to the EIA, the average American uses ~400 gallons of gasoline per year, which is equivalent to about 10 barrels of oil per year.

There are 17,000 kWh of energy potential in one barrel of oil, meaning that there are ~17,000 kWh in 10 barrels.

An average human generates around 0.6 kWh per 8-9 hour work day. So $17,000 / 0.6 = 28333.33$.

But humans direct muscle labor more efficiently than machines using oil so we handicap the work output by 40% ($28333.33 * 0.4 = 11333.33$)

There are around 250 work days per year so, then we can divide $11,333 / 250 = \sim 45$ years of human work