

Growth in industry

The industry sector includes the manufacture of pharmaceuticals, food and drink as well as metals, minerals, and chemicals. In 2013 industry was responsible for about 21% of Ireland's energy demand. In addition to emissions from the energy used, the sector emitted 2.4 Mt CO₂e originating in manufacturing processes. Some 28% of industry's energy demand was met by gas, 36% by electricity, and the rest by oil, coal or biomass.

In the 2050 Calculator the industrial sector's future energy use is determined by two factors:

- industry growth (described here) and
- industry energy intensity (described on another page).

The choice here is of different pathways rather than increasing scale of effort. They are different to the Trajectories 1-4 in other sectors and have therefore been labelled as Trajectories A, B and C.

Each trajectory uses the same projected rate of economic growth. However the composition of the growth is different in each trajectory. Trajectory A assumes that industry accounts for a high proportion of Irish GDP, and Trajectories B and C assume the industry accounts for progressively lower proportion of GDP growth.

Trajectory A

Trajectory A assumes that Irish industry will expand availing of the opportunity to manufacture new low-carbon technologies, and low-carbon replacements for existing goods and machinery. At an average growth rate of 2.5% to 2050 industrial output will more than double.

Trajectory B

Trajectory B assumes that the growth trend of 2000 to 2013 continues, leading to a 45% increase in industrial output by 2050.

Trajectory C

Trajectory C assumes Ireland's economy shifts from industry into other sectors, leading to industrial output declining by 30-40% between 2013 and 2050.

Interaction with other choices

The size of the industrial sector affects the need for freight, but this dependence is not handled automatically by the Calculator – you can choose the setting for each independently.

Figure 12: Energy demand in TWh/y assuming Trajectory 1 on industry energy intensity

