Livestock and their management

In 2013, there were over 26 million livestock animals (includes poultry), including over 1 million dairy cows. The 2050 Calculator contains two options relating to agricultural biomass and land use: livestock management (described here) and land use management (described on another page).

Trajectory 1

Level 1 assumes that, by 2050, domestic food production and exports take priority. Livestock numbers increase by 30% over 2013 levels. This means approximately 300,000 more dairy cows grazing on Irish grass in 2050 (in line with projections under the 2020 Food Harvest Strategy) and an additional 3 million cattle, sheep and pigs combined.

Trajectory 2

Level 2 assumes that livestock numbers remain constant through to 2050. However due to manure yields increasing by 0.2% per year, more energy from waste is generated from agricultural byproducts.

Trajectory 3

Level 3 assumes that livestock numbers reduce by 10% by 2050. This means there will be approximately 100,000 fewer dairy cows in Ireland by 2050.

Trajectory 4

Level 4 assumes a significant shift away from livestock production in Ireland, potentially caused by us eating less meat, by switching from beef to less land-intensive meats such as chicken, or increasing the agricultural focus on bioenergy. Livestock numbers decline by 20% on 2010 levels, equivalent to 200,000 fewer dairy cows by 2050 and 2 million less cattle, pigs and sheep.

Figure 33: The calculator assumes that every cow produces 400 oven dried kg of manure each year.

Figure 34: TWh(primary energy)/yr under the 4 trajectories assuming Trajectory 1 in the 'land dedicated to bioenergy lever'



