



## **A5 Western Transport Corridor (A5 WTC)**

### **Appendix TNI – Theme Report: Climate Change**

**29 July 2016**

## Appendix TNI – Theme Report: Climate Change

- 1 Addressing climate change is a national and UK wide objective, and the subject of legally binding targets, set by the Climate Change Act 2008 to reduce emissions 80% by 2050.
- 2 Following the Paris agreements, a law mandating a 100% cut has been proposed which would mark a dramatic increase in ambition. The final 20% is seen as the most difficult to cut, as it would have to come from sectors such as farming, which are not as easy to decarbonise as power plants.
- 3 In Northern Ireland, agriculture is the largest source of carbon emissions;
- 4 There are a large number of incentives and targets for reducing the use of fossil fuel in transport, over both public and private transport vehicles. The level of carbon emissions from vehicles is expected to reduce significantly by 2030.

### Current Northern Ireland legislation

A mix of Executive, UK and EU policies and legislation covers greenhouse gas emissions in Northern Ireland.

#### In Northern Ireland:

- The Northern Ireland Executive in May 2010 approved a proposal by the Minister for the Environment to establish what was then known as the Cross Departmental Working Group on Greenhouse Gas Emissions. The group has since been reconstituted as the Cross Departmental Working Group on Climate Change
- The Northern Ireland Executive, in its Programme for Government (2011-2015) has set a target of continuing to work towards a reduction in greenhouse gas emission by at least 35% on 1990 levels by 2025. This is a lower target than those set for Scotland and Wales, reflecting the larger share of emissions from difficult to reduce sectors such as agriculture.

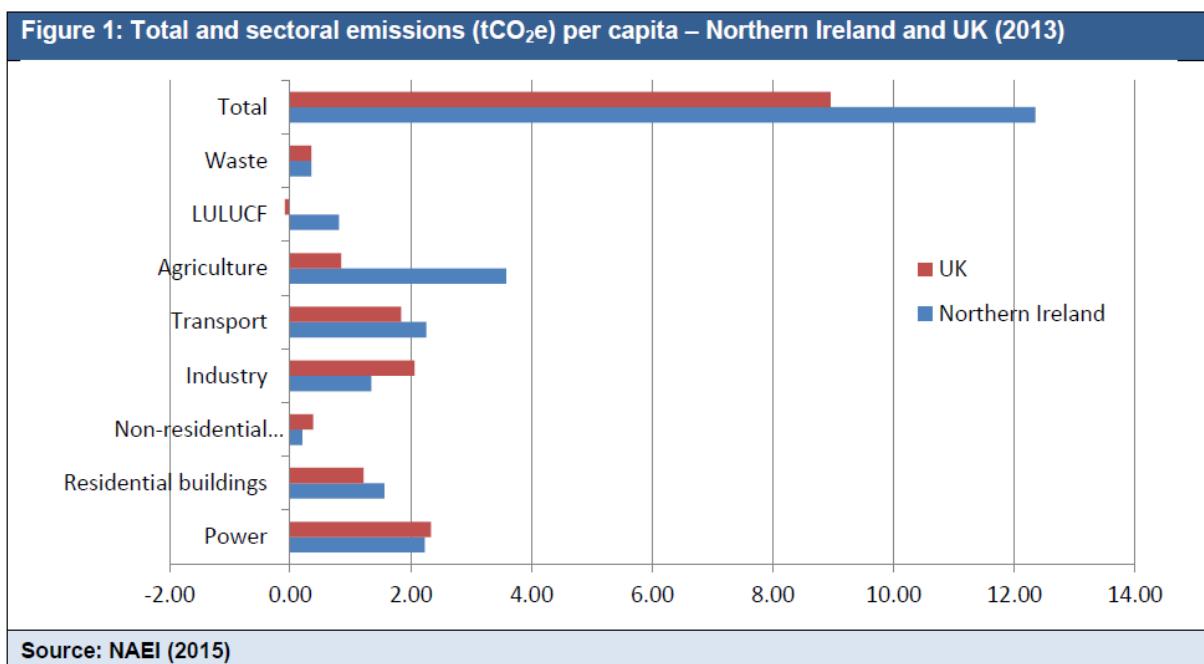
#### In the UK:

- The 2008 Climate Change Act extends to Northern Ireland following consent by the Northern Ireland Executive and Assembly. The Act requires the UK to cut emissions by at least 80% by 2050 and also introduced legally-binding five year carbon budgets, which set a ceiling on the level of greenhouse gases the UK can emit on course to the longer-term target.
- Although the Act sets no targets for Northern Ireland, England, Scotland or Wales it's implicit that all the countries contribute to the required reductions.

Source: *The appropriateness of a Northern Ireland Climate Change Act – December 2015 Update*

- 5 In 2013, Northern Ireland's emissions represented about 4% of the UK's total greenhouse gas emissions, three above its share of UK population (2.8%) and GDP (2.1%).
- 6 These differences can be explained by the fact that Northern Ireland has relatively high shares of emissions from agriculture and land use, land use

change and forestry (LULUCF), and relatively high per capita emissions in agriculture, transport, residential and the LULUCF sector compared to the UK as a whole (Figure 1)



## Agriculture

- 7 Agriculture accounts for the largest source of emissions in Northern Ireland, at around 29% (6.5 MtCO<sub>2</sub>e), compared to 9% in the UK as a whole, with per capita emissions in Northern Ireland of 3.6 tCO<sub>2</sub>e compared to 0.9 in the UK. With around one third of the population of Northern Ireland living in rural areas and over 24,000 farms it is a key sector of the Northern Irish economy.
- 8 There is low abatement potential of up to 1 MtCO<sub>2</sub>e (17% of projected baseline emissions) by 2030 for agriculture in Northern Ireland. This reflects the fact that agriculture will reduce its emissions more slowly than other sectors (such as power and transport) as abatement options require more development: However, as reported by the Committee on Climate Change 2016, there is minimal evidence of progress in the (industrial and) agriculture sectors.

## Transport

- 9 The share of transport in the overall emissions profile is similar in Northern Ireland and the UK (18% compared to 21%), with 4.1 MtCO<sub>2</sub>e emissions in 2013. However, emissions per capita are higher in Northern Ireland than in the UK as a whole (2.3 compared to 1.8 tCO<sub>2</sub>e respectively), reflecting relatively dispersed population and reliance on private rather than public transport. Car ownership rates in Northern Ireland have increased in recent years but are now on par with the GB average (at 476 cars per 1,000 population<sup>7</sup>).

10 There are a range of Policy measures already in place which have improved the efficiency of new cars and vans, and which can be expected to continue to do so. These include stretching standards for vehicle CO<sub>2</sub> emissions, and the increased adoption of Ultra Low Emission vehicles (electric vehicles, hydrogen fuelled vehicles) which would bring important co-benefits in improved air quality (and potentially in grid balancing), as would measures to moderate demand for travel.

## **References**

The appropriateness of a Northern Ireland Climate Change Act – December 2015 Update

Meeting Carbon Budgets – 2016 Progress Report to Parliament. Committee on Climate Change June 2016.