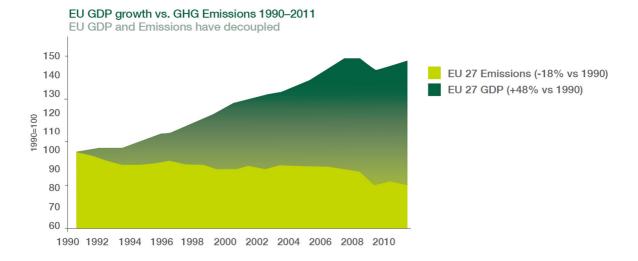
UK summary of analysis on 2030 GHG targets

1. Evidence shows reducing GHG emissions and economic growth have gone hand in hand¹



2. Ambitious GHG target represents 0.19% of EU GDP per year in 2030

- Enerdata's modelling shows that the cost of a 40% domestic target by 2030 is equivalent of 0.19% of the EU's annual GDP in 2030. This is in the context of projected EU growth to 2030 of 25%².
- The Stern Report (2006) showed that with inaction, the estimated long term global cost of climate change would be equivalent to around 5-20% of global GDP³.

3. Overall costs of maintaining the energy system are not the same as costs of 2030 GHG targets

- Maintaining the energy system costs money whether you adopt a 40% target or not. The Commission Impact Assessment identifies the energy system cost in the reference (no 2030 GHG target) scenario as 14.03% of GDP in 2030. This is the costs of replacing old electricity and heat generation to keep the lights on. A 40% GHG target increases this by just 0.15%⁴.
- The 40% GHG target brings important benefits compared to not taking a 2030 GHG target:
 - It could reduce Europe's annual fossil fuel import bill by 0.4% of GDP (around €70bn)⁵ by 2030;
 - o Cleaner air could save Europe 0.12% of GDP from health costs in 2030⁶.

4. A target less than 40% costs the EU more over the longer term

- The Commission's Low Carbon Roadmap shows that an EU 2030 target reflecting domestic reductions of 40-44% on 1990 levels is on the <u>least cost</u> trajectory to -79 to -82% for 2050⁷. An EU reduction of 80-95% by 2050 is consistent with a global below-2°C climate change scenario.
- EU Leaders have repeatedly committed to this 80-95% objective for 2050 (most recently at February 2011 European Council)⁸. A target below 40% makes it more expensive for the EU to meet its own objective due to the extra effort required after 2030 to bring us back on track.

5. Early agreement on targets will reduce cost of capital and speed up investment decisions

- The EU's share of the global low carbon and environmental business market is worth over €900 billion a
 year⁹.
- Investor groups have raised concerns about delaying a decision on 2030 targets until 2015 or later: "the
 cost of capital for Europe's energy sector will be higher and major investment decisions will be deferred"¹⁰

References

https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/119175.pdf

¹ Source: EEA; IMF (October 2013 WEO database), © European Union, http://epp.eurostat.ec.europa.eu, 1995-2013. Responsibility for the adaptation lies entirely with UK Department of Energy & Climate Change

² GDP projections are taken from the IMF (April 2013 WEO database) and European Commission (latest Reference Scenario projections

³ Stern, Nicholas. 2006. "The Stern Review on the Economics of Climate Change"

⁴ European Commission, 2014, Impact assessment on energy and climate policy up to 2030, Table 14: Energy system costs and sub-components

⁵ Enerdata, 2014. Costs and Benefits to EU Member States of 2030 Climate and Energy Targets.

⁶ Enerdata, 2014. Costs and Benefits to EU Member States of 2030 Climate and Energy Targets.

⁷ European Commission, 2011, A Roadmap for moving to a competitive low carbon economy in 2050.

⁸ European Council Conclusions of 4th February 2011, page 6, paragraph 15.

⁹ Low Carbon and Environmental Goods and Services Report for the UK's Department for Business, Innovation and Skills, July 2013, page 15: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224068/bis-13-p143-low-carbon-and-environmental-goods-and-services-report-2011-12.pdf

¹⁰ Ref to source of quote. Full quote is as follows: "We are concerned that we are unlikely to have certainty about the post-2020 framework until 2015 or beyond. This is 'yesterday' from an infrastructure investment perspective... if this uncertainty continues, the cost of capital for Europe's energy sector will be higher and major investment decisions will be deferred" − Quote from Institutional Investors Group on Climate Change who represent over 80 pension funds and asset managers across Europe, collectively worth €7.5 trillion in EU-wide assets.