

# Tackling Climate Change: Technological solutions and political challenges

***Adair Turner***

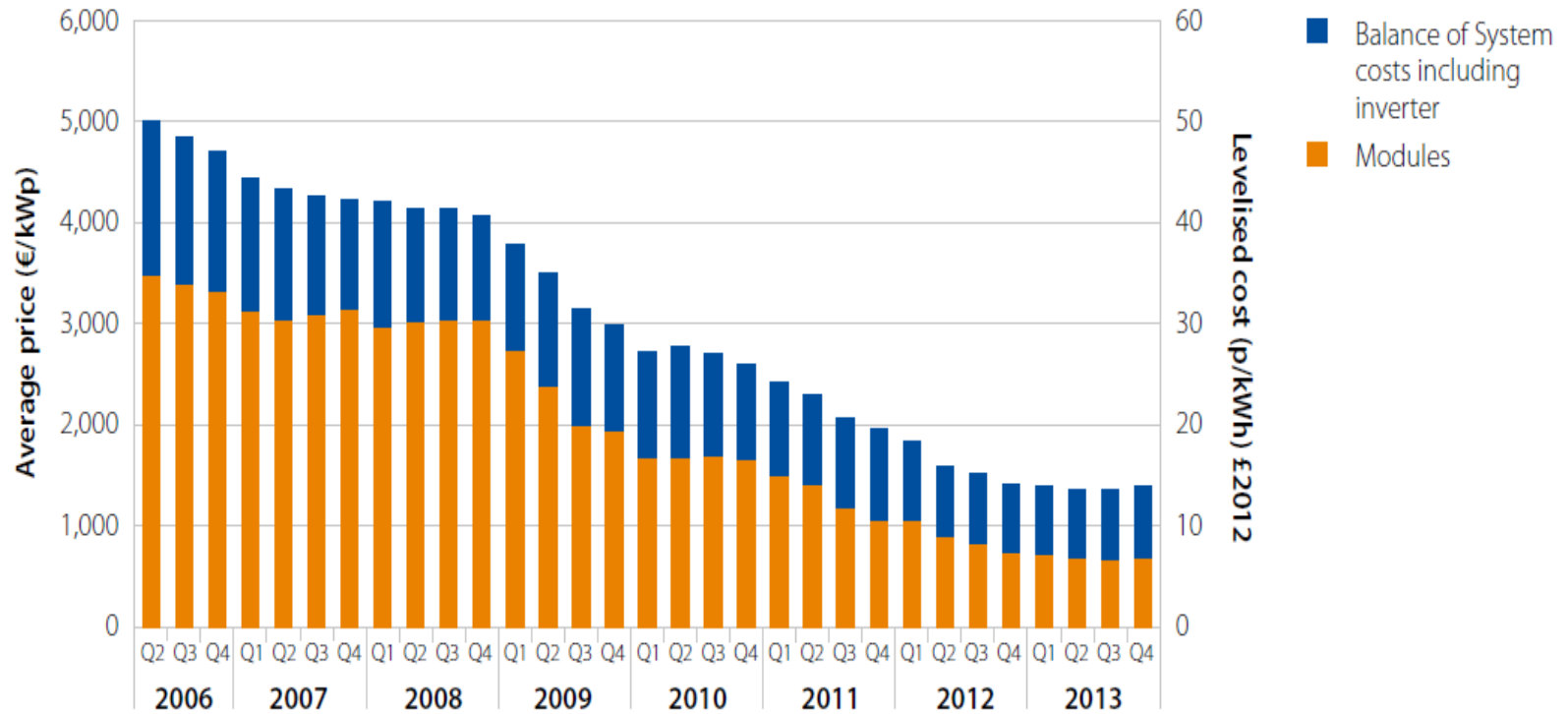
*Senior Fellow, Institute for New Economic Thinking*

## **REvision 2015**

Japan Renewable Energy Foundation

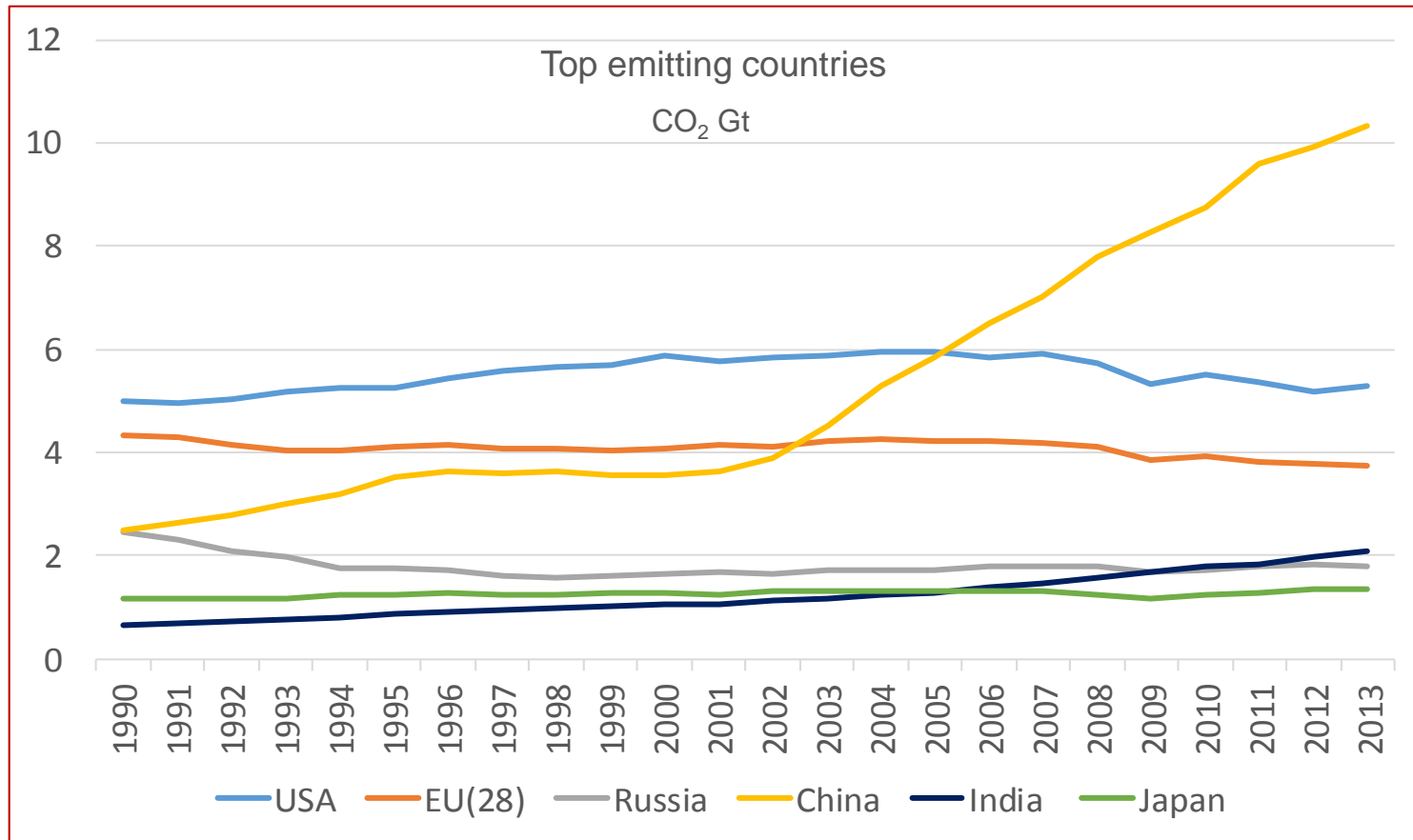
Tokyo, 4 March 2015

# Reduction in capital costs of midscale solar PV



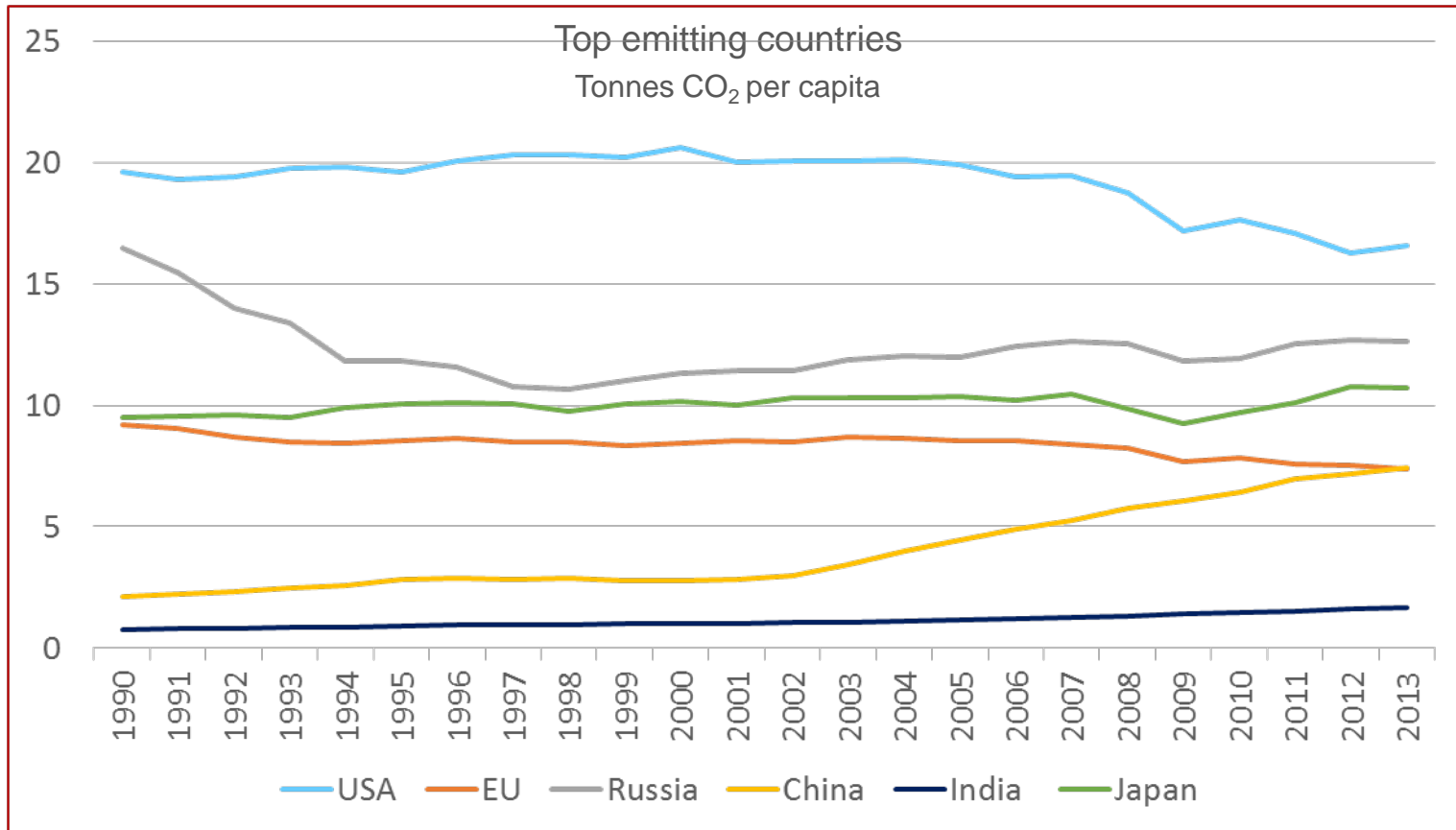
Source: Climate Change Committee, UK (2013)

# CO<sub>2</sub> Emissions from fossil fuel and cement production



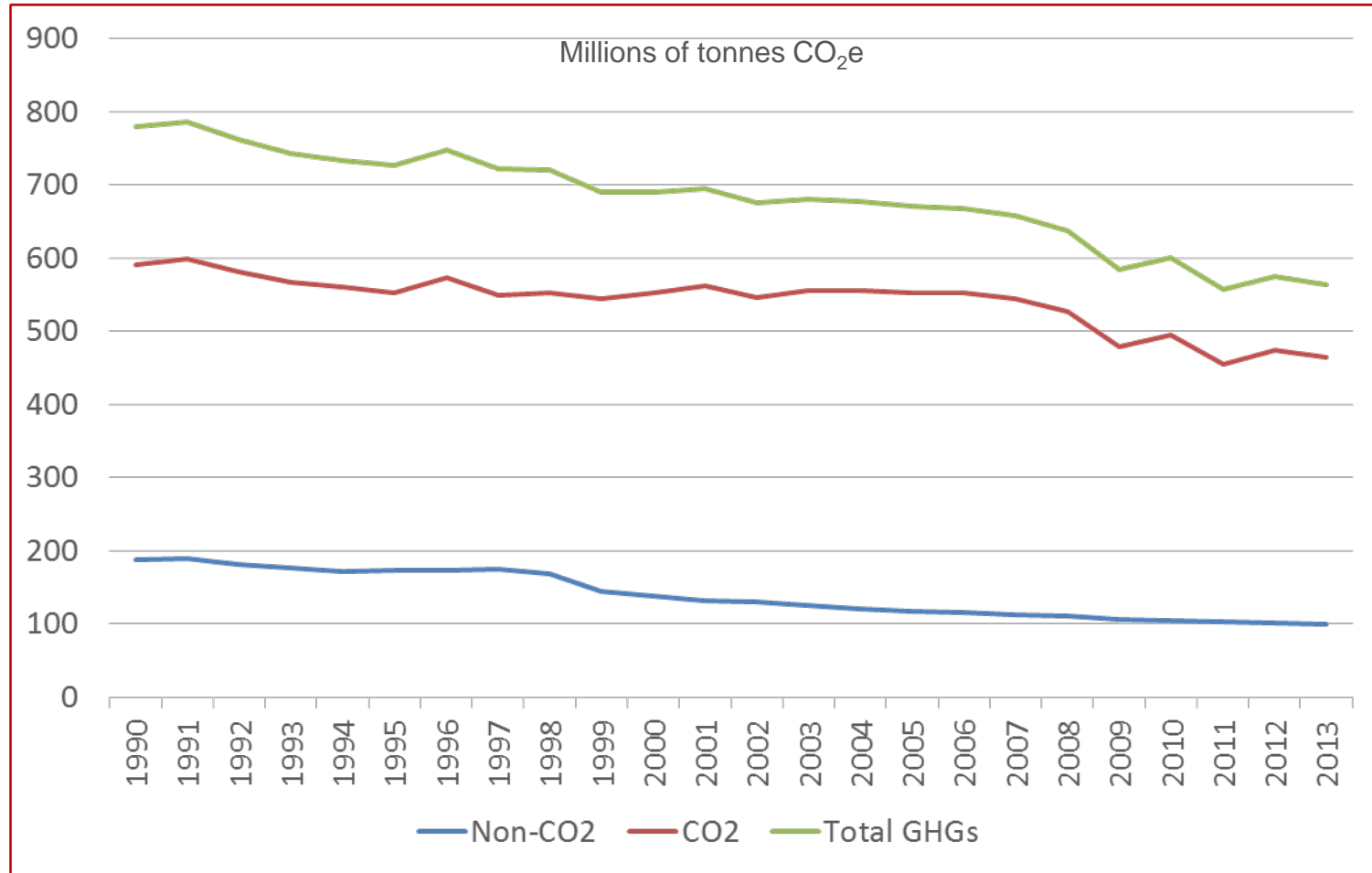
Source: Trends in Global CO<sub>2</sub> emissions Report, PBL Netherlands Environmental Assessment Agency and European Commission

# CO<sub>2</sub> Emissions per capital from fossil fuel and cement production



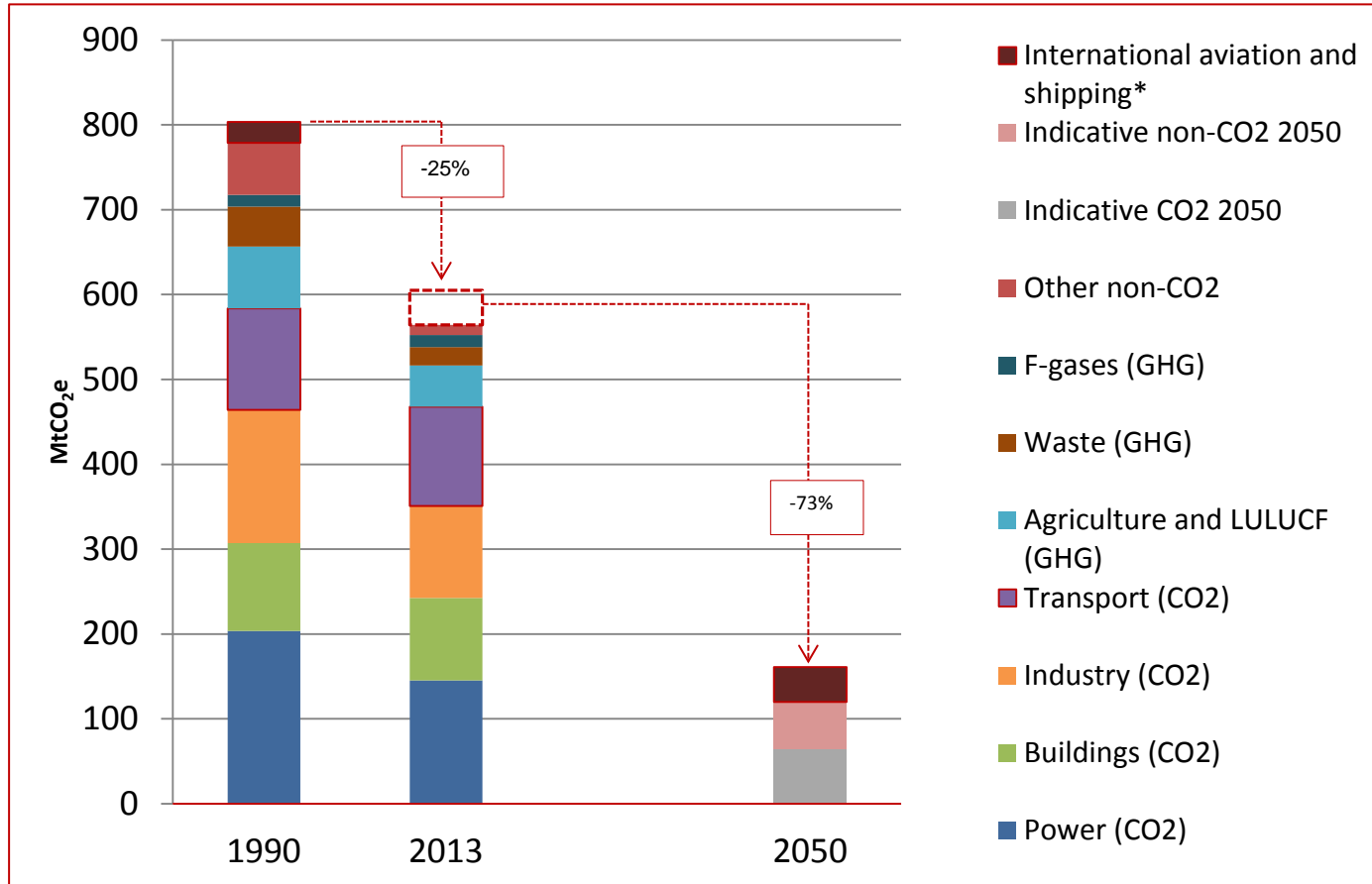
Source: Trends in Global CO<sub>2</sub> emissions Report, PBL Netherlands Environmental Assessment Agency and European Commission

# UK Greenhouse gas emissions (1990-2013)



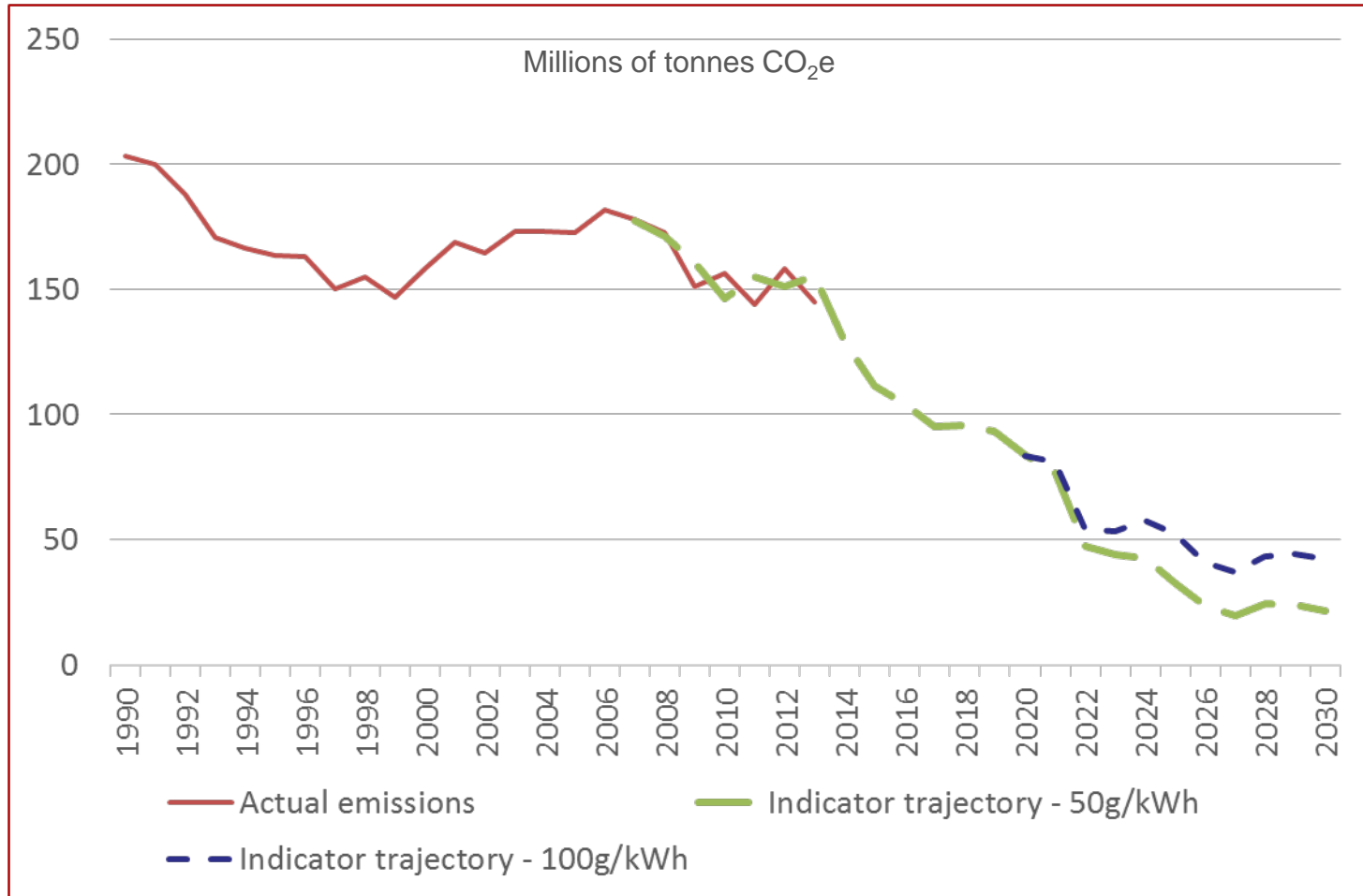
Source: Department for Energy and Climate Change, UK (2013)

# UK Greenhouse gas emissions by sector (1990-2050)



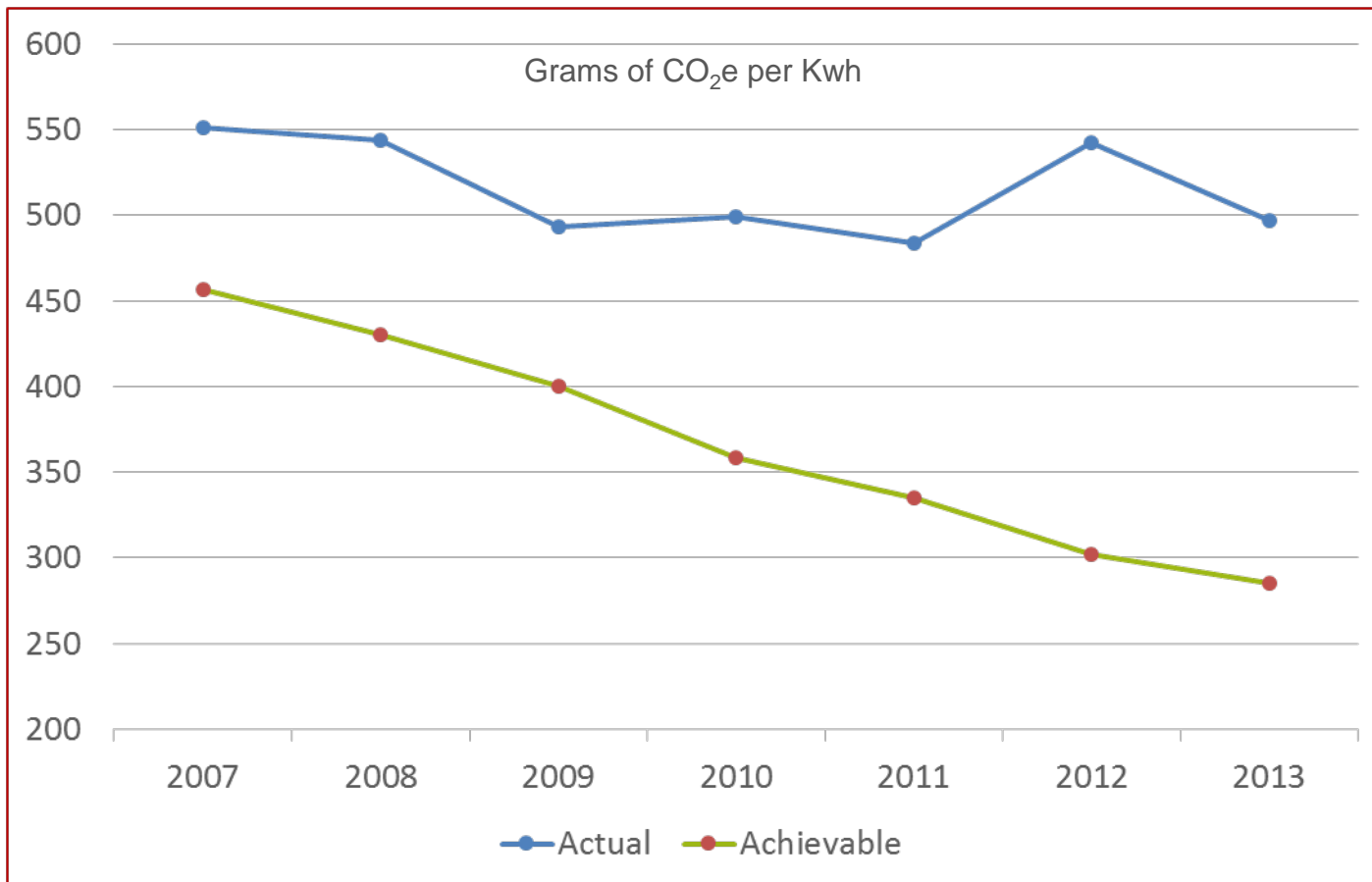
Source: UK Climate Change Committee, *Meeting Carbon Budgets, 2014 Progress Report*

# Actual power sector emissions (1990-2013)



Source: Department for Energy and Climate Change, UK (2014)

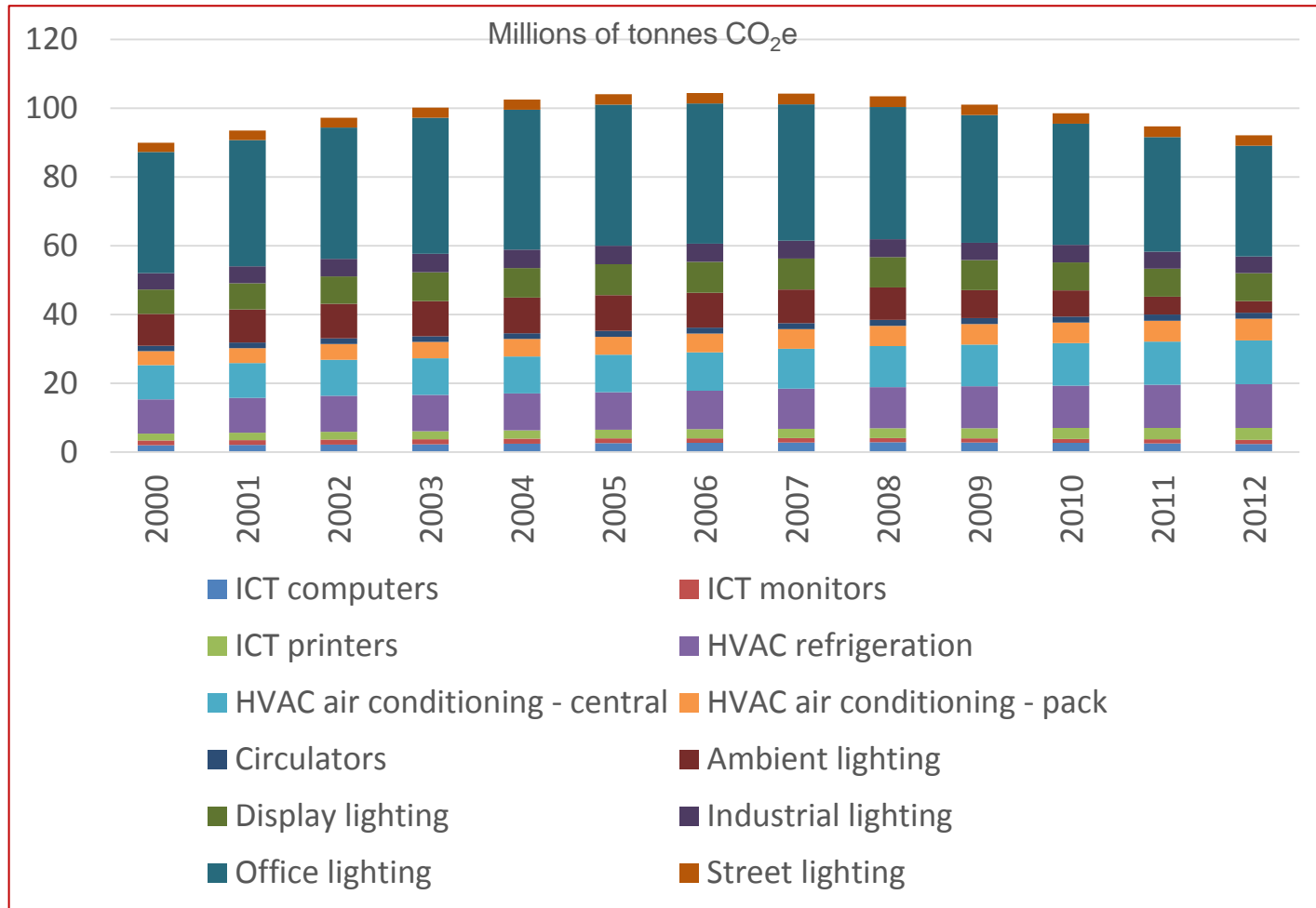
# Achievable emissions intensity (2007 to 2013)



Source: Department for Energy and Climate Change, UK (2014)

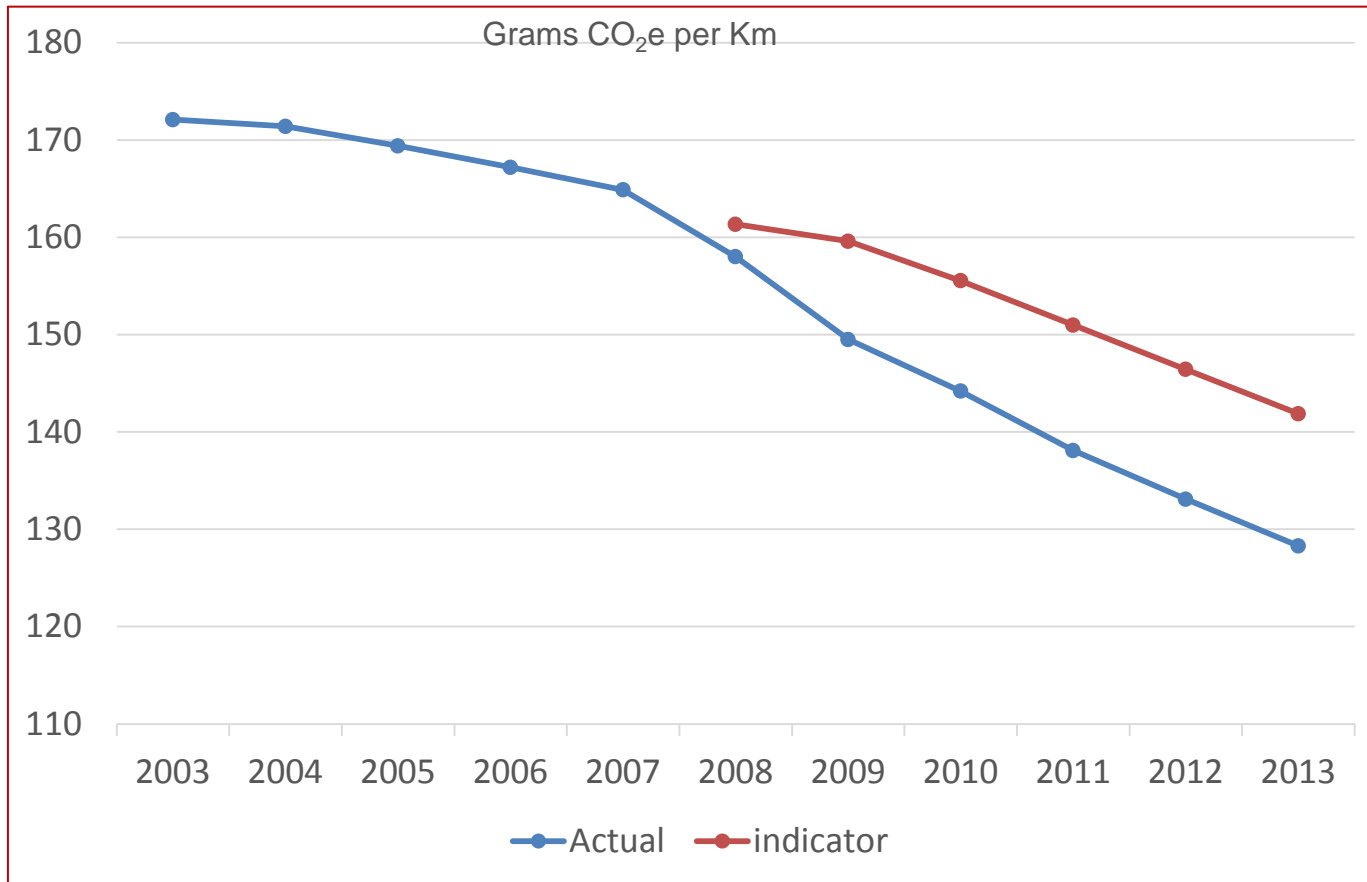


# Electricity consumption in non-residential buildings



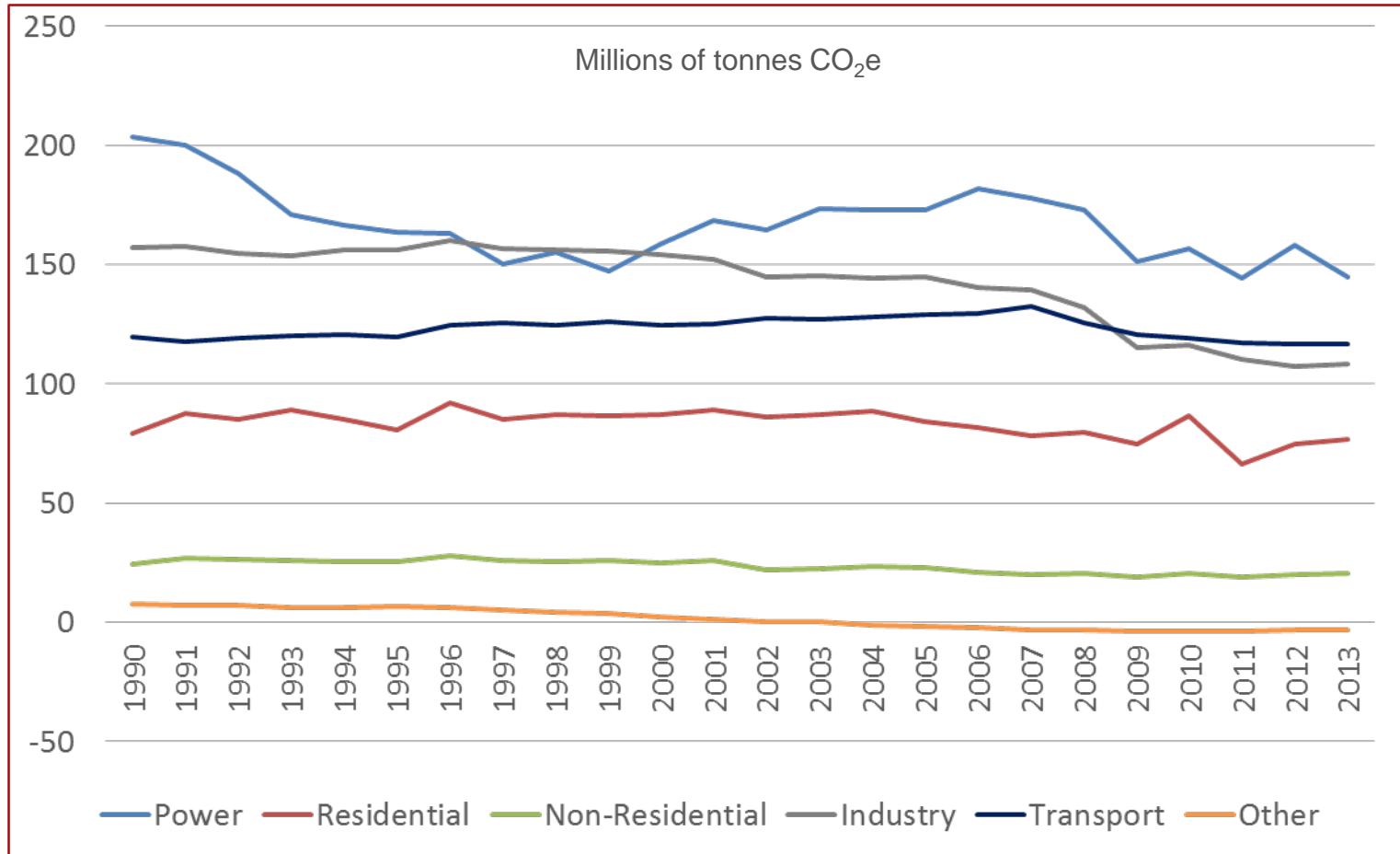
Source: Department for Energy and Climate Change, UK (2014)

# New car CO<sub>2</sub> versus indicator



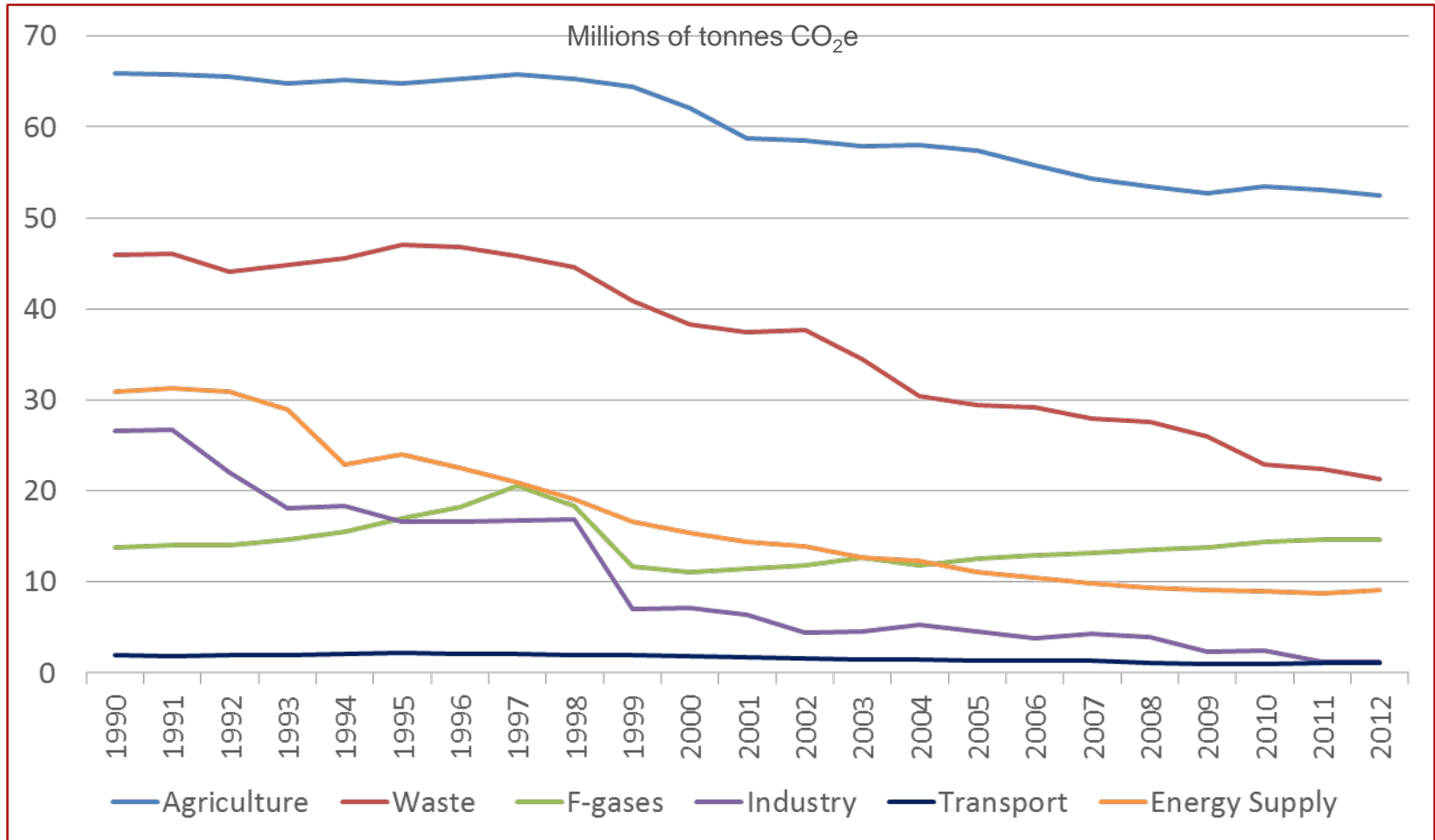
Source: Department for Energy and Climate Change, UK (2014)

# UK CO<sub>2</sub> emission by sector (1990-2013)



Source: Department for Energy and Climate Change, UK (2013)

# UK Non-CO<sub>2</sub> emission by sector (1990-2013)



Source: Department for Energy and Climate Change, UK (2014)