

Cutting greenhouse gases could grow the economy

June 19 2009

Over £14 (\$23) billion more in products and services could be produced in Northern Ireland's economy each year if greenhouse gas producing resources were used as efficiently as they are in the rest of the UK, a research group at Queen's University Belfast has predicted.

The Sustainability and Management Research Group at Queen's University Management School used the sustainable value approach, which links greenhouse gas (GHG) emissions and economic performance to calculate the figure.

A study found that the Northern Ireland economy only earns £1,208 for every tonne of [carbon dioxide](#) emitted, which is about £650 less than the average for England, Scotland and Wales.

According to the researchers, the effect of Northern Ireland emitting around 22.2 million tonnes of carbon dioxide each year in a less efficient way than Great Britain, is that its economy loses about £14.4 billion.

Professor Frank Figge who led the analysis said: "If Northern Ireland is to achieve the same level of efficiency as Great Britain at its current level of GHG emissions, local economic output would have to increase by about 53 per cent.

"If we want to meet both our economic and sustainability targets then we must become more GHG-efficient. Our analysis shows that there is scope for significant efficiency improvements.

"As the UK economy moves towards a low carbon economy, [greenhouse gas](#) performance and efficiencies will become increasingly important to regional competitiveness.

"Countries and regions with low GHG efficiencies may therefore find themselves at a disadvantage.

"The sustainable value approach has proven to be a valuable tool that can help regions assess their GHG efficiencies, now and in the future."

Dr Herb Castillo, research fellow at Queen's University Management School, said: "Realising the opportunities for improved efficiencies and economic output will require new and innovative approaches from all Northern Ireland sectors.

"Among other things, there is a need for greater utilisation of cleaner technologies and processes, improved management of energy use and carbon impacts, engaging the public and increasing awareness."

Northern Ireland, Scotland and Wales all underperform compared with the English [economy](#) with respect to GHG emissions, with Wales having the least efficient performance of all four countries when carbon dioxide, nitrous oxide and methane are taken into account.

Differences in industry structure may account for this, with the iron and steel industry playing a more important role in Wales than other parts of the UK.

In terms of carbon dioxide efficiency, however, Northern Ireland did manage to narrow its performance gap between 1990 and 2006.

Source: Queen's University Belfast

Citation: Cutting greenhouse gases could grow the economy (2009, June 19) retrieved 30 January 2023 from <https://phys.org/news/2009-06-greenhouse-gases-economy.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.