Local Authority CO2 Indicators: Phase 1

Justin Goodwin

Objective

"Community CO2 indicators"... A mandate for Local Authorities to respond

Assessment a possible Climate Change Indicator. ... For Performance Framework for Local Authorities

- Centrally estimated (using National Statistics)
- Annually updated
- Sector & Local Authority specific
- Base year and target metric

Assess the reliability of the indicator:

- Time scale for production and update
- Data used and gaps
- Uncertainty

Provide indicative future target estimates

- Incorporating CCP & Energy White Paper
- Incorporating sample LA good practice data

Recommendations for a suitable indicator

- Technical development needed
- Possible Support Activities

Boundaries of the Indicator

- ✓England only
- ✓CO2 only
- ✓ Selected Sectors
 - 🗙 No EUETS
 - 🗙 No Motorways
 - $_{\times}$ 92% of total emissions included

✓ Energy End Use

- But.. additional efficiency measures can be applied and measured.
 - E.g. electricity use in homes, businesses and public service measures championed by LAs for existing and new buildings. Emissions from transport can also be influenced locally through efficiency and fuel switching measures.
- End-user subset to the headline indicator and labelled as "Indirect" emissions.

🔀 X No Product use X

Boundaries of the Indicator



Method



2004 Emissions: Business



Uncertainties

Uncertainties Overall 2 - 8%

- National uncertainties (From GHGI)
- Spatial uncertainties (Expert Judgement)
 - 3% (e.g. Gas, Electricity)
 - 5% (e.g. road transport fuel consumption)
 - 10% (e.g. residential solid and liquid fuels)
 - 30% (e.g. Industrial solid and liquid fuels)



Solid & Liquid ☺ Minor roads ☺ Gas & Electricity ;-) ☺

Projection uncertainty



Projecting Emissions

Why?...

 To see what savings might be expected and likely distributions across LAs

Estimate Basic Projections (2010 & 2020)

Without CCP Measures

Review of Measures

Integrate Measures into projections

- Future 2010 & 2020 With CCP Measures (By LA)
- Assumes implementation according to CCP timeframe
- "Enhance" with Local Measures and adjust applicability based on LA measures
- Local Measures (from sample LAs)
- National Measures (From CCP)
 - LAs can have impact on...
 - Out of LA control (EUETS)

Measures being included:

Literature reviewed:

- UK Climate Change Programme including the Regulatory Impact Assessment and appraisals of individual measures
- Consultation documents related to the EEC3 targets and Illustrative mix of measures
- DTI Energy Review The Energy Challenge 2006
- Smarter choices programme report
- Transport measures in the CIVITAS programme
- London LEZ environmental assessment report
- London congestion charging annual reports
- Green Alliance and CSE reports on Local Authority actions
- Draft 'Planning Policy Statement' on climate change
- Merton Rule.org website

Other related documents considered

- Local Government White Paper 2006
- Nottingham Declaration Online Action Pack

Projecting Emissions



Projected Savings by LA





Recommendations: for the Indicator

Priorities for improving the reliability of the Indicators

- Major & Minor road transport modelling
- Modelling of domestic fuel use
- Fuel Sales data (transport)
- Point source database review of data from the EUETS for 2005
- Improved "high resolution" industrial gas consumption data
- Improved "high resolution" domestic gas consumption data
- New surveys (Solid & Liquid Fuels Industry & Domestic)

Recommendations: To Support the Indicator

Helping LAs identify achievable Targets

- Improving estimation of future reduction potential
- Provision of information on costs and effectiveness of measures.

Supporting Local Authorities monitor progress for themselves

- Standardise methods for estimating impact of measures by LA
- Standardise methods for estimating emissions & projections
- Standardised methods for reporting and sharing related information and good practice

Questions:

What are your priorities for Local Authority Inventories?

- Development of..
- Use of...

Is the proposed "Community Indicator" suitable as a means to measure improvement?

Is there a need for reporting from Local Authorities?

- Emission performance
- Implementation of measures
- Projected targets

Is there need for guidance for Local Authorities in association with this indicator?

- For local inventories
- For projecting emissions