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Learn more about Environment 2.0

Pilot Carbon Audit

A Pilot Project by FutureEverything/Futuresonic, Tyndall Centre Manchester, Imagination@Lancaster and Creative Concern, May 2007

Downloads

[Futuresonic Pilot Carbon Audit Report](#)

[Coping with Carbon: Events Guide](#)

[Emissions Calculator: Spreadsheet](#)



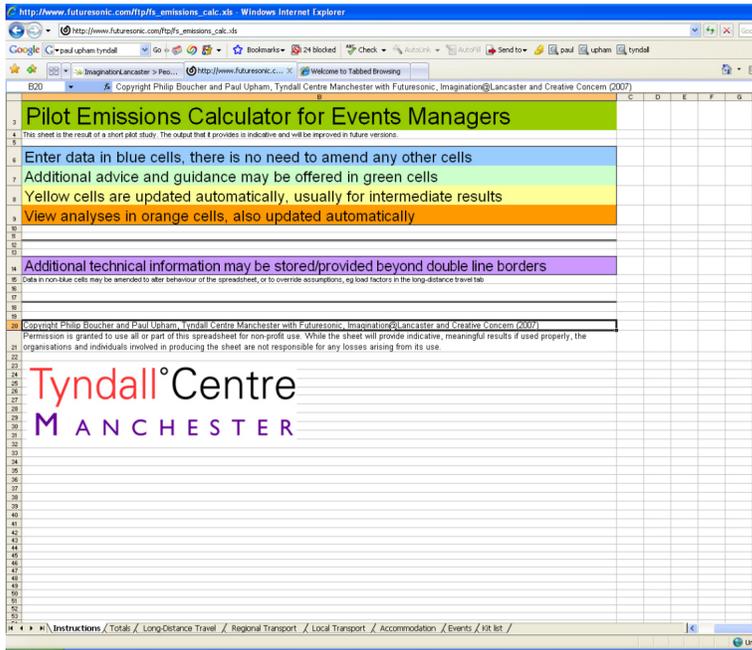
FutureEverything has established a partnership with Tyndall Centre Manchester to help begin its work on measuring, managing and mitigating the Futuresonic festival's contribution to climate change. The Tyndall Centre brings together scientists, economists, engineers and social scientists who together are working to develop sustainable responses to climate change through trans-disciplinary research and dialogue. The Futuresonic/Tyndall partnership is undertaken in partnership with Imagination@Lancaster, and is assisted by Creative Concern, a sustainable development communications agency in Manchester. Underpinning the partnership is the understanding that the cultural sector has an important role to play in answering and making sense of the questions posed by climate change.

The audit is being approached as a pilot process that will build in detail year on year, with an 'open source' approach making the method fully transparency and available. This is unusual in carbon audits of leisure events and festivals, for which the norm is to commission consultants and offset a headline emissions total, without declaring full method or scope. An open method will make it possible for this to be repeated by other organisations and events.

In terms of results, focusing on the music strand of the festival in 2006, the Futuresonic international festival generated first order carbon dioxide emissions of some 297 - 791 tonnes, depending on whether the full warming effects of aviation emissions are accounted for. For comparison, national per capita carbon emissions are in the order of approximately 10t CO₂ per year. The music events at Futuresonic thus cause the equivalent of the annual CO₂ emissions of approximately 30-80 people. In terms of (temporary) biosequestration within the UK, this would require, for example, 1.3 hectares of oak woodland to be protected over a 100 year period (ECCM, 2002). Each year of the festival would require another 1.3ha to be so protected.

Participating in the following Tyndall Tasks or Projects:

The University of Manchester



Stakeholder and Public Perceptions of 2030 Bioenergy Scenarios for Yorkshire and Humber

VOLUME 1

Dr. Paul Upham
Dr. Simon Shackley
Miss Holly Waterman

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Tyndall Centre - Manchester Publications

2008

Agnolucci P, Ekins P, Iacopini G, Anderson K L, Bows A, Mander S, Shackley S. In Press. "Different scenarios for achieving radical reduction in carbon emissions: a decomposition analysis". Ecological Economics.

Bows, A., Anderson, K., Upham, P. *Aviation and Climate Change, Lessons for European Policy*, Routledge Press (in press).

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Anderson, K., Mander, S., Bows, A., Shackley, S., Agnolucci, P., Ekins, P., The Tyndall Decarbonisation Scenarios – Part II: Scenarios for a 60% CO₂ reduction in the UK, proceeding towards publication, Energy Policy

Gössling, S. and Upham, P. (forthcoming 2008) *Aviation and Climate Change: A Whole System Perspective*, Earthscan Ltd, London, provisional title.

Gough, C., "State of the art in carbon dioxide capture and storage in the UK: an experts review". International Journal of Greenhouse Gas Control

Mander S. (2008). *The role of discourse coalitions in planning for renewable energy: a case study of wind energy deployment*. Environment and Planning C: Government and Policy, 26, 583-600.

Mander, S., Bows, A., Anderson, K., Shackley, S., Agnolucci, P., Ekins, P., The Tyndall Decarbonisation Scenarios – Part I: Development of a Backcasting Methodology with stakeholder participation, proceeding towards publication, Energy Policy

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Bows, A., and Anderson K., (2008), Contraction and Convergence: An assessment of the CCOptions model, submitted to *Climatic Change* under review

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Bellaby, P. and Upham, P. et al (2007) *Public Engagement with Hydrogen Infrastructures in Transport*, research report for DfT Horizons Research Programme – Number PPRO 4/54/2, University of Salford.



House of Commons

Environment, Food and Rural Affairs Committee

Climate Change: looking forward

Ninth Report of Session 2004–2005

Volume I

Table 3: UK greenhouse gas emissions by source (million tonnes carbon equivalent)

Source	1990	1995	2000	2005	2010	2015	2020
Energy supply	75.2	63.2	59.7	61.9	51.9	48.7	46.4
Business	26.9	25.6	25.2	24.3	24.2	25.2	26.1
Industrial processes	18.3	16.7	10.8	10.6	10.4	10.4	10.4
Transport	34.1	34.3	35.8	36.4	38.7	41.0	42.9
Residential	21.5	21.8	23.9	22.3	20.7	21.0	21.9
Agriculture	15.4	14.9	14.1	13.4	12.2	12.1	12.0

Data source: *Drafts, Review of the UK Climate Change Programme, Consultation Paper, December 2004, Table 3*

39. One way in which to reduce the impact of road transport on climate change is to increase fuel efficiency. Under a voluntary EU agreement the fuel efficiency of new cars is currently required to increase such that average emissions fall to 140 g/km in 2008/09. In 2003, average CO₂ emissions from new cars in the UK were 172.1 g/km. According to the Energy Saving Trust (EST), current trends suggest that vehicle efficiency is being improved, but "not sufficiently quickly". The EST felt that consequently, this target was unlikely to be achieved in the UK.⁴⁹ This is reiterated in the recent Transport Committee report, which highlights that it has taken six years to reduce vehicle carbon emissions by 17.7 g/km.⁵⁰

40. Friends of the Earth argued that fiscal measures such as road fuel duty needed to be increased to curb transport emissions.⁵¹ The EST—concurring with recommendations made by the Transport Committee⁵²—argued that the current differentiation in Vehicle Excise Duty (VED) was insufficient to encourage purchasing of lower-carbon cars:

The top two bands for the lowest emission cars only cover three per cent of new vehicles. ... as well as increasing the differential between bands we would certainly welcome at least one further band to penalise the more inefficient vehicles.⁵³