

Case Study

Immigration Advisory Service

ICT and CO₂

ICT equipment may play a potentially significant role in reducing carbon dioxide emissions among private and public sector user organisations. It was estimated in 2008¹, for example, that the enabling potential of ICT could lead to 'other sector' CO₂ emissions reductions of 7.8GtCO₂ in 2020 – this being five times the size of the industry's own carbon footprint.

The Carbon Intent project

The CMA's Carbon Intent research project, supported by the Carbon Trust, aims in its first phase to better understand the usage and carbon impacts of three modern business processes – homeworking, conferencing and remote call centres. Research indicates that these systems of operating a workforce are more carbon efficient than their alternatives: travelling to a central office or travelling to a meeting.

The CMA and Carbon Trust have collaborated with the Immigration Advisory Service (IAS) to look into the use of ICT to facilitate homeworking and teleconferencing as enablers of a reduction in carbon dioxide emissions.

Immigration Advisory Service Vision

The IAS is a charity, funded by the Legal Services Commission and others. It provides legal and information services and other support to immigrants and asylum seekers in (or those seeking entry to) the UK. It is by its very nature, socially sustainable and aims also for environmental sustainability, not least through the reduction of its CO₂ emissions from travel and transport usage.

The IAS is directly attempting to reduce travel time and costs. As an organisation it is looking for ways to provide its services to the same standard but minimise the travel requirements of both its staff and those who use the services. Initiatives, at various stage of development, include remote contact centres, remote legal advice, localised training and homeworking.

There are further reasons to reduce travel as well. The Graduated Fees Scheme (for legal advisors) now doesn't pay lawyers for travel time – hence there is also a financial incentive for the IAS to reduce its employees travel time – and therefore satisfy funders. Another travel reduction initiative involves staff training. Trainers are now 'brought-in' to centralised locations to train a large number of staff at once. This results in less travel and travel time by staff.

¹ Report by the Global eSustainability Initiative, SMART 2020 (2008)
IAS Carbon Intent Case Study V3.5

IAS Structure

The IAS has 400 staff in total based in the central office (190, Great Dover Street) and through 20 regional offices. There are also international offices in Bangladesh, Pakistan and Nigeria. Offices are located where there is a high proportion of applications and refusals [for immigration]. Many of the regional offices are based at the premises of other organisations e.g. Citizen's Advice Bureau. These regional offices provide a central 'surgery' to immigrants and asylum seekers requiring advice and legal help. These surgeries are deliberately located in areas that are regionally central so that those who require the services can easily and cheaply travel for help. Some 200 of these staff are legal advisors. Most of the rest are case-work assistants, reception, administration and other support functions.

Remote Contact Centres

Considerable CO₂ reductions are possible through home-based call centre working. This is commonly termed 'remote contact centre' working.

Typically, for those organisations that adopt the remote contact centre approach, relevant staff spend all or most of their employed-time based at home rather than being located at a central call centre. Remote contact centre workers may use the same or similar ICT equipment as other homeworkers.

The remote contact centre employee no longer needs to commute to an office: implying a reduction in carbon dioxide emissions from travel/transport, notably in respect of commuting. There may be rebound effects through additional use of transport, (see above, under Homeworkers) including that needed for managers to visit and supervise staff. These are taken into account when calculating carbon dioxide emissions.

The IAS provides a number of central and regional phone numbers for asylum seekers and immigrants to get information and book appointments with appropriate legal advisors. IAS has recently switched all of these calls to be routed through an outsourced contact centre run by Home Call Centre (HCC). Previous to this, calls were answered by two or three receptionists at each regional office. All call centre services provided by HCC only use workers located at their own homes – i.e. remote contact centres. The remote contact centre worker will log the call, take down the callers details and carry out a mini-assessment of the caller. This information is then used to get the caller an appointment with a legal worker.

Did you know?

The IAS also run three 24hr emergency lines.

Whilst two of these are linked to the emergency services, one is manned by fully-trained remote contact centre workers sitting in their own home.

Use of a remote contact centres has a number of advantages for the IAS. Primarily there is a reduction in number of lost calls (i.e. there is sufficient staff to ensure calls are taken quickly). This is highlighted by the number of calls halving from 32,000 to 16,000 per month following the switch over to remote contact centres. In part this is attributed to people no longer having to ring back if the lines were busy. The IAS have found that remote contact centres are more cost-effective (cost per successful call) than previous use of regionally-based receptionists. Among other benefits, the use of remote contact centre working has offered greater scope for meeting high standards as an equal opportunities employer, not least in relation to disabled people and those who find it physically difficult to leave the house. The IAS have also found that there is reduced sickness leave and staff turnover.

At present there are approximately 45 remote contact centre workers at IAS. Of these, 43 work from home 5 days per week and 2 of them for 2 days per week.

As a result of using a remote contact centre, IAS prevents the release of **93 tonnes of CO₂ per annum** into the atmosphere².

Homeworking

Information and Communications Technologies (ICT) are enabling organisations around the world to introduce or expand their homeworking programmes. In this study, the term 'homeworking' is used to denote the process of working some or all of the time from an employee's home rather than, in combination with other members of an organisations' workforce, from a centralised office. Homeworking appears to have two main areas of impact on carbon dioxide emissions associated with work.

Firstly, the employee no longer – or to a lesser degree - needs to commute to the office. That implies a reduction in carbon dioxide emissions from travel/transport. There may be, however, some rebound effects, especially where increased car use arises, for example to ferry children to and from school, or drive to the shops. In this case study, these are taken into account when calculating carbon dioxide emissions.

Secondly, an employee may not need a permanent space in the office and will not be using office equipment - implying a reduction in overall office energy use and associated emissions. Of course, that employee will transfer at least some of that carbon footprint to a home-based office. The net result may not be clear cut.

Due to the organisational structure of the IAS and the nature of services offered, homeworking is not a major operational process. Offices and 'surgeries' are centrally located so that those who require support, and who are often of limited means, can access them easily and cheaply. However, the IAS is trialling new ways of working to benefit the recipients of advice as well as the environment. One such approach is via a pilot scheme providing telephone legal advice that generates revenue for the IAS. At present there are 4 available legal workers on the phone (9 in total, but working shift patterns), although the IAS looks to increase this service. This reduces the need for clients to travel to a central office and to take time off work. Currently the telephone legal advisors are located in the Sheffield office, but there is a potential to re-locate them to be home-based.

Increasingly, there are other opportunities at the IAS to work from home. Some managers have this option and can access the server and emails via a web-based exchange. As an example, the Director of Operations does not have a fixed central office and works from home full time. She is provided with a laptop and a broadband connection. The Chief Executive also regularly works from home.

As a result of homeworking the IAS prevents the release of a minimum of **2 tonnes of CO₂ per annum**, into the atmosphere³.

There is clear potential for the IAS to increase its numbers of homeworkers through the legal team and the managers.

² See *Data, Methodology and Assumptions* - BCC paper for further information on this and other carbon calculations.

³ This figure only accounts for the homeworking of the Director of Operations at the IAS.

Teleconferencing

The replacement of physical face-to-face meetings with ICT-enabled virtual meetings or teleconferences is increasingly common and is having a growing overall impact upon organisations' global carbon footprint through reduced business travel.

The term 'teleconferencing' is used here to mean the real time communication between a group of more than two people in at least two locations and using one of a suite of facilities. Teleconferencing is used to reduce time, cost and carbon emissions. The equipment that facilitates teleconferencing may also be used for seminars, conferences, presentations and other group activities.

These facilities tend to come in three forms: Audio conferencing – which makes use of conventional voice telephony; video conferencing - which uses networked cameras that relay pictures as well as sound to all of the participants; and web conferencing - where documents are shared 'live' over the web either independently or at the same time as audio or video conferencing.

A 2008 study⁴ found that web and video conferencing are the most popular ICT-enabled tools for reducing an organisation's carbon footprint. These technologies and services were more attractive to more organisations than homeworking. This was attributed to a perception that CO₂ reduction resulting from teleconferencing is more straightforward to measure than that from homeworking.

Current uptake of teleconferencing at the Immigration Advisory Service is low. Audio conferencing is the most popular, with staff regularly communicating between offices via an audio-conference link, although actual numbers of calls are not currently measured. The IAS are currently investigating the potential for, and experimenting with, video-conferencing as a means of intra-office communication.

The remote contact centre staff regularly communicate with other members of the team via web and audio-based conference facilities, although it is unlikely that these calls replace face to face meetings but rather are an integral part of homeworking.

In a recent survey of 85 CMA member organisations 58% use audio conferencing, 47% use video conferencing and 46% use web conferencing. Of those organisations that use conferencing, each employee would typically make a total of 50 conference calls per year. Of the 85 surveyed, 33% currently measure, or intend to measure, the CO₂ emissions savings resulting from use of teleconferencing.

For further information on the Carbon Intent project, or other low-carbon ICT activities, please contact the Communications Management Association (www.thecma.com). Thanks to Keith Best at the IAS and Bob Travers and Martyn Smith from Home Call Centre for facilitating this research.

⁴ A global survey of 345 senior executives by The Economist Intelligence Unit (2008)

Carbon Intent recommendations

Based upon the information provided for this case study, the following may be helpful in further cutting carbon dioxide emissions via homeworking, teleconferencing and, at some future point, remote contact centre processes:

1. By re-locating the 9 legal workers providing a telephone advisory service from Sheffield to their homes, the IAS could prevent CO₂ emissions by a further 19 tonnes p.a.
2. If a further 21 of the 200 legal workers provided an appropriate advisory service from home via a telephone/web link, rather than a regional surgery, IAS could abate a further 63 tonnes p.a. of CO₂ emissions.
3. By increasing the number of managerial staff who work from home full-time from 1 to 5, the IAS could increase CO₂ abatement by over 8 tonnes per annum.
4. The provision of advice and training to all homeworkers on how to reduce the carbon footprint of the home office will help ensure greater carbon emissions savings.
5. By extending the current video-conference trial to replace 5 intra-office meetings per week, each with an average of 5 people involved, the IAS could prevent CO₂ emissions by a further 41 tonnes p.a.
6. The provision of workforce guidance and advice on sustainable travel will help encourage adoption of lower carbon options and practices for a) business travel and b) commuting.