EIA has been and will continue to be an important tool in helping the UK to minimise greenhouse gas emissions, reduce the social impacts of new and existing developments, and to contribute to a thriving and sustainable national economy. However, whilst guidance is plentiful on issues on how to consider the effects of schemes, there is limited guidance or best practice models that can be drawn upon to advise EIA practitioners on how to consider the effects and impacts of the associated mitigation measures.

Indeed, if we take, for example, a development whose vehicular trip generation materially worsens existing congestion on key sections of the highway network at the expense of vehicle emissions, severance and noise, the generalised response amongst transport professionals will be to turn towards our engineering background to find a solution that increases the available network capacity that avoids such effects. What isn’t typically the case, however, is the application of our transport expertise to an environmental context, which would comprise the identification of alternative forms of mitigation and comparison of their respective environmental effects to determine the most environmentally-prudent course of action.

Naturally there will be many occasions where there may be no suitable alternatives or where the difference between alternatives is immaterial. However, there will inevitably be instances where this is not the case and in light of the fact that EIA should provide rigorous, logical and credible assessment of all of the affects that have the potential to be significant, this aspect of EIA should be considered, at least to some extent.

For instance, whilst road engineering improvements may provide the necessary benefit to mitigate the effects of a scheme, emissions will be derived from its construction and the curing of materials, not to mention the fact that newly installed network capacity will often release latent traffic demand that will further worsen the environmental effects of traffic. Alternatively, however, measures that seek to influence travel behaviour in favour of non-car modes may be as successful at mitigating the effects of development, whilst also achieving longer term (permanent) emission savings compared to the relatively obvious approach of installing new road capacity: this being achieved by the shift away from car-borne travel to more sustainable and socially equitable forms of travel.

The approach is not difficult and it can be undertaken to varying degrees. At its most basic level, travel planning is about identifying the opportunities and constraints associated with travelling to a development (existing or future) by use of non-car modes, and identifying a package of measures that will encourage the uptake of non-car travel, and the transmission of this information in such a way as to inform people of their available travel options and the consequences/benefits associated with each: the intention being to encourage a switch away from the car. Historically this process has been applied in the context of isolated developments in order to reduce the vehicular trip generation of that particular land use.
However, because in most circumstances there will remain a residual need to travel by car, the maximum that can be achieved from such an approach will always be constrained to minimising travel by car to a practicable level.

In more recent times, however, the approach has been extended to encompass wide-area travel initiatives that bring together multiple trip generating land-uses under a single over-arching travel plan. This increases the number of journeys that can be transferred away from single-occupancy car trips to such a degree that the extent of the change can be used to offset the residual trip generation of the development seeking to mitigate its trip generation effects.

Whilst this process has not been undertaken under the rigour of EIA, the approach has been used to support the planning application for a development comprising over 1,000 residential dwellings in Huntingdon, Cambridgeshire where, with carefully crafted travel behaviour surveys across several business parks, it was possible to demonstrate, to the satisfaction of the local highway authority and Highways Agency that the development would result in a zero increase in vehicular traffic on the adjoining highway network.

Hence, not only has this approach, which we term ‘Trip Banking’, unlocked the potential of that particular development site but it has also significantly reduced the need to make large scale improvements to the existing highway network, which would have otherwise led to short-term environmental effects associated with emissions from its construction and the curing of materials.

More importantly, however, the approach will ensure a long-term (permanent) saving in vehicle emissions as a result of a fewer car-borne journeys when compared with the traditional approach of installing new capacity.

In view of this, Trip Banking has significant potential to assist in delivering the objectives of EIA and therefore has the potential to become a keystone of EIA best practice models, sitting alongside an explicit presumption in favour of deploying the most environmentally prudent, practical and commercially feasible mitigation. That is not to say that all EIA development should adopt a trip-banking approach. Rather that, in the interests of showing a rigorous, iterative and credible approach to EIA, the potential opportunities and constraints associated with all available mitigation should be set out to allow informed decisions to be made.

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