

## **Landvaluescape for Green Property Taxes**

by Dr Tony Vickers, Prof Sarah Sayce & Prof Munir Morad

Taxes exist primarily to fund government activities but also to influence the behaviour of economic agents and regulate markets, or to redistribute wealth. Classical liberal economic theorists (Smith, 1776; Ricardo, 1817) conceived ideas on 'good' taxes before modern society rediscovered its intimate relationship with Nature's finite resources. Therefore the attributes of such taxes did not include their ability or otherwise to impact on the sustainability agenda.

The Green Tax Shift Paradigm can be traced to Arthur Pigou (1920). In his "Economics of Welfare", he pointed out that most human activities give rise to external public costs, which distort markets for goods and services. Pigou called for those who create these 'externalities' to be taxed in some way proportionate to these costs. He also recognised that such taxes should substitute, rather than supplement, other taxes which themselves distort markets in a negative way, i.e. are 'welfare negative'.

Externalities can also be positive. In particular, the collective workings of society add economic value to particular locations beyond where those activities are sited: the 'spillover effect'. An example on a large scale is the extension of the Jubilee Line (the JLE). Several independent studies (e.g. Mitchell and Vickers, 2004; Atisreal and Geofutures, 2005) have shown how the JLE, by exploiting network connectivity, resulted in uplifted property values around its ten new stations amounting to between £3bn and £9bn more than it cost, after discounting the value of buildings. Such value uplift arises almost entirely from the investment over centuries in London's infrastructure, by private and public sectors. Building the JLE in a desert would not create land value: it would lack connectivity to underlying economic demand.

The same applies to every economically rational public or private investment anywhere, from major irrigation scheme to house extension. Those with title to land nearby receive unearned (generally) positive 'externality' – bankable added wealth – through no effort of their own.

Mazor (2009) brought liberal theory up to date, arguing that there is no fundamental 'right' to ownership of such wealth from any planetary resources: e.g. land sites, airport landing slots or broadcast spectrum wavebands. It is their potential utility to everyone which gives natural resources value. Mazor sets the modern philosophical basis for policy measures, including Green Taxes, to be used to correct the injustices and inefficiencies flowing from 'enclosure' (possession) of land and natural resources. The effectiveness and applicability of green taxes is therefore inextricably linked to national systems of land tenure and controls on land use.

Interest in green taxes grew in the wake of the first UN climate change conference in Rio (1992). Several studies of the subject followed in North America (Doem and Phidd, 1992; Durning & Bauman, 1998; Taylor *et al*, 1999). All included property taxes among the mix. During the same decade, interest in shifting the basis of property taxes off the building value onto site value alone also grew (Robertson, 1999; Jacobs, 2000) and by 2006 it had been broadly accepted worldwide that an annual land value tax (LVT) was potentially an effective environmental tax. Several papers at successive Global Environmental Taxation Conferences (GETC), including two by these

authors, had helped establish this consensus (Vickers, 2002; Vickers *et al*, 2006), despite flawed implementations of specific versions of LVT in certain countries (Kelly and Stoianoff, 2006)).

This paper considers how implementation of such a fair and efficient green property tax can be aided by modern computer-aided mass assessment (CAMA) of land values and geographic information systems (GIS) to visualise the dynamic of land values; also to assess the prospects of developing this 'landvaluescape' methodology in Britain after election of a centre-right Coalition Government in 2010,

Regulation of spatial development – planning law - is the main means of controlling externalities in the public domain in Britain. Taxation is used by government with little effect, by virtue of its main incidence at the time of transaction or change of use. Spatial planning creates limits on supply of land. Some limits on supply are inevitable in a crowded island on a finite planet. The consequence is speculation: holding a valuable finite commodity out of use, in order to raise its market price.

In combination with the centuries-old privatisation of money (credit) supply, planning law has led to cyclical booms in property (land) prices, helping to divert wealth from productive human enterprise into speculative acquisition of land. The inevitable 'busts' that follow booms, triggered by fears of illiquidity, cause immense harm to the productive economy, as we are seeing now. Meanwhile increases in wealth created by that real economy are captured by non-productive landholders.

LVT is uniquely capable of capturing the entire 'unearned increment' of value that would otherwise accrue to landholders or to those who supply the loans with which to purchase land 'ripe' for development or properties favourably located. Other property and land taxes are less effective, for the following reasons.

1. Rates, which include value of buildings, are intrinsically inflationary: while buildings depreciate in value over time, the value of land often rises. The tax is therefore always relatively higher on the building element than on the land element, especially as revaluations are infrequent. Under-used sites and less well maintained but valuable buildings are taxed lighter than equivalent fully utilised sites. Investment in buildings is penalised. This encourages speculative land acquisition among developers. The British National Non-Domestic Rate (NNDR) is typical of what is called in other countries variously a 'flat' or 'undifferentiated' *ad valorem* property tax.
2. Council Tax has an added 'non green' dimension, in that it allows a 25% rebate for single occupancy. This encourages under-occupation of the built housing stock.
3. A transaction-based property or land tax which only becomes due upon sale or award of planning permission acts as a disincentive to sell. This suppresses property market activity, adding to purchasers' costs (since the tax is passed on) just when they most need to invest in developing their sites. Capital Gains Tax, Stamp Duty Land Tax and Development Land Tax (1976-85) are species of property transaction tax, which do however, albeit inefficiently, capture some of the 'unearned increment' of land value.

4. Any property tax which falls on the occupier will discourage responsible use and full occupation. Property taxes elsewhere are invariably levied on owners. In the UK, property investment owners are generally unimpacted by property taxes. However the recent Empty Property Rate, extending liability from occupier to owner of **empty** commercial properties, has encouraged demolition of many properties that would otherwise have been worth restoring when economic conditions improve. Had the tax been levied on site value rather than gross property value – **and** on owner – then there would have been no incentive to demolish the building. By definition, a vacant site has no occupier.
5. VAT is levied on construction in a clearly ‘un-green’ way: new build is exempt, whereas renovations attract full VAT. Increasing VAT means incentives to restore buildings rather than demolish and rebuild are even more perverse.

Vickers (2003) showed how barriers to implementing LVT in Britain are of two kinds: political and technical. Since home ownership has extended to some 70% of the population and over time becomes skewed towards the older income-poor, any property tax is unpopular. The “Devon Pensioner” revolt over council tax revaluation in 2005-7 highlighted this. Meanwhile the dearth of affordable and suitably structured UK datasets on land (use, ownership and value), combined with a lack of experience among British tax and valuation professionals in using modern CAMA/GIS methods, meant that expert advice presented to Government on the practicability of LVT was unfavourable (Johnson and Hart, 2005; McGill and Plimmer, 2004).

In their paper for the World Congress of Surveyors in 2006, the authors set out how Value Maps might become ‘the next utility’. The ability to visualise how the value of land changes over space and time, reflecting the intricate patterns of human economic interaction with one another and Nature, is seen to be “*a means of making property taxes more equitable and of monitoring and restoring economic health*” (Vickers *et al*, 2006:561). The potential of GIS to facilitate Value Mapping was recognised early in the computer age by Howes (1980).

In his doctoral study Vickers concluded:

*“...at the present time, despite maturity of spatial analysis techniques and developments in automated valuation and property data modelling, the policy and institutional environment is not yet conducive to the necessary property tax or land information market reforms.”* (Vickers, 2009)

Vickers’s research found that, uniquely, Britain could develop Value Mapping not primarily as a tool for tax administrators (as occurs in other countries studied) but as a tool for a wide range of property market players: investors, insurers, spatial planners. The existence of such maps would start to reveal the landvaluescape, much as small scale atlas maps of a physical landscape whet appetites to study larger scale maps showing the finer detail and suggest many more uses of ‘traditional’ maps.

Among such uses might emerge that of educating the wider public about how the land market is operating against the interests of the productive economy, the natural environment and society at large. Many officials, at all levels of Government, are already persuaded as to the desirability of this ‘green tax’. A

'landvaluescape visualisation' tool could help make LVT politically and technically feasible. A Policy Delphi conducted by Vickers confirmed this.

In parallel to academic studies of LVT in Britain, including those of McLean and Muellbauer, a number of reports commissioned by New Labour provided encouragement (Rogers 1998; Jacobs, 2000; Barker 2004). However the response from professional bodies upon whose advice governments place considerable weight was mixed (Johnson and Hart, 2005), so interested professionals in a range of disciplines came together in 2004 to form the Professional Land Reform Group (PLRG). This was initially hosted by Transport for London (TfL), whose American Commissioner Bob Kiley was keenly interested in methods of land value capture (LVC) for financing improvements to London's transport infrastructure (Whelan, 2003).

The main problem with using LVC purely to fund a particular infrastructure project is the difficulty of defining the influence zone of that project. Innumerable factors relating to the wider economy impact on land values. It is therefore extremely difficult to extract that discrete component of value that is attributable to any one positive externality. Add to that the British lack of data and professional experience in using it and it is unsurprising that no major use of LVC has yet secured official support here. The introduction of BIDs (Business Improvement Districts) and the recent decision to fund part of Crossrail from a supplementary business rate across the whole of GLA is as near to LVC as we have seen. Yet much of London will hardly benefit at all from Crossrail (indeed parts may suffer) and Crossrail itself extends beyond the GLA area, with network effects reaching across much of southern England.

Proponents of LVT argue that the only fair and efficient way to use LVC is a nationwide general tax. This would capture the value effects (externalities – positive and negative) of all economic and natural activities: from global sea level rise to moving a single bus stop. Every level of government, from EU to parish, could 'precept' into the total land value of component sites, to help fund all those public services which government is charged with providing in that area. The Valuation Office Agency (in England) would conduct regular site valuations using property market transaction data in a more sophisticated way (CAMA) than now, engaging with tax stakeholders via GIS and Value Maps to secure maximum transparency and accuracy.

If LVT were to be adopted, it would be in gradual replacement for other 'welfare negative' taxes which have been shown to impede efficient market activities in the real economy. National Insurance and income tax directly make labour costs higher than they might be to firms; corporation tax reduces profits which a firm would otherwise invest or use to reward shareholders, such as pension funds; VAT makes goods more expensive and prices out domestic goods in favour of those imported from lower cost (but possibly less 'green') economies. Harrison (2006:208) calculates these 'deadweight' taxes at £138bn of lost GNP, in 2005/06 alone. Since then tax burdens have increased and are likely to rise further in the light of national debt.

The current centre-right UK government might not seem favourable to LVT. However the economic plight of the country offers a unique opportunity. Several members of Government are known to be both supportive and knowledgeable on its potential both as a 'green tax' and as a means of "modifying cyclical instability" in financial markets (Cable, 2008). Cable, now

Business Secretary and responsible for banking reform, was author of his Party's tax policy paper, in the first draft of which he proposed a "National Property Tax" based on site values. Cable remains convinced that this is "just a first step" (ALTER, 2009). Climate Change & Energy Secretary Huhne is another career economist who has long advocated LVT (Huhne, 1990), writing as recently as 2007: "*Neither the property market nor the tax system are fit for purpose in the modern age without a carefully constructed land value tax*" (Huhne quoted in Vickers, 2007).

There are 28 Labour MPs in the new Parliament sponsored by the Cooperative Party, whose manifesto supported LVT. The Green Party, now with their first MP (Caroline Lucas), agrees with Greens in Ireland's Coalition Government, who managed to include a Site Value Tax in its Programme for 2009-2011.

The strong likelihood is that the 25% cuts in public expenditure which the Government is attempting will prove economically and politically damaging in the short-term and may be impossible. Even if they are achievable, Government are likely to be receptive to ideas which could achieve structural fiscal stability by other means. It is known that some Conservatives, belonging to the centre-right Bow Group, favour LVT. There is therefore a 'rainbow' coalition across the entire UK political spectrum that might come together to develop plans, in this Parliament, for a national green property tax.

In conclusion, it is widely, if not universally, accepted that LVT is an efficient and equitable form of green taxation. However it is particularly difficult to implement in a country where home ownership is widespread among an ageing, income-poor population, where current commercial property ownership is frequently divorced from occupation and where the agencies responsible for managing necessary land information datasets are dispersed and inexperienced in using GIS & CAMA. Nevertheless the prospects for its introduction in Britain have improved, given the new political landscape and the potential benefits of Value Maps as a tool to support public policy and investors' decision making. In a world where issues around sustainability of taxation and natural resources are ever more important, the landvaluescape for green property taxes is wide open.

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### **Authors' Biographical Notes**

**Professor Munir Morad** is a Professor of Environmental Planning and Head of Department (Urban Environment and Leisure Studies) at London South Bank University. His portfolios span environmental management and planning, land information systems, and knowledge management. He is also the Joint Editor of *Local Economy*.

**Professor Sarah Sayce** is a Chartered Surveyor, Head of the School of Surveying & Planning at Kingston University and Chair of the University's Centre for Excellence in Teaching and Learning for Sustainable Communities. She currently sits as an elected member of the RICS Governing Council and their Valuation Professional Board. She is also on the Editorial Board of four Journals, including *Local Economy*.

**Dr Tony Vickers** is an independent researcher specialising in land information policy and comparative property taxation. He is also a founder member of the Association for Geographic Information, Chair of ALTER (Action on Land Taxation & Economic Reform) and Secretary of the Professional Land Reform Group. He is a District Councillor in Berkshire.

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M Morad

