

Incentivising design quality and sustainability

February 2013

Introduction

VAT is a powerful tool and changing the rates can incentivise the sustainability agenda. The majority of CO₂ emissions in the built environment emanate from the existing building stock along with a smaller quantity from the process of new construction. The focus should therefore be on improving existing buildings wherever possible.

Current VAT rates incentivise CO₂ emissions by distorting the construction market in favour of new build. In the residential sector, the current VAT rate encourages new build construction rather than improving existing buildings, even when saving energy. For private and public (public/private) finance the different VAT rates divert resources towards new construction.

Not only do current VAT rates incentivise emissions, they distort the market and its ability to respond to other policy objectives. This distortion is a major constraint for sustainable green procurement policy.

There is a need to reappraise ways in which the VAT system can be used to help progress the Government's low carbon agenda, in a balanced, more fiscally neutral way.

Re-aligning VAT rates on construction

For a number of years there have been calls for a review of VAT in construction to remove the significant anomalies. These are supported in large part were they endeavour to remove the differential between new build and existing construction for more sustainable development. However all VAT proposals to date have not:

- Retained a 0% VAT rate (which under EU Regulation is much valued by the UK Government as a tool to incentivise new build housing)
- Incentivised a market led improvement in design quality of sustainability in new build residential properties.
- Have not equalised VAT rates between 'general' new build and sustainable improvements and repairs.

The proposal outlined in this paper aims to meet these additional objectives whilst providing a strong 'carrot and stick' incentivised approach to sustainability and design quality, providing flexibility in application and a route for moving to a level playing field in construction VAT. The proposal also aims to reflect UK Government policy objectives on sustainability, refurbishment and the National Planning Policy Framework, whilst meeting conditions set out by the EU that a realignment of VAT must form part of wider social policy objectives.

Proposed VAT policy realignment

- In order to incentivise sustainable refurbishment, there should be a reduction in the 20% VAT rate to 5% on repair and improvement work to existing buildings wherever the overall standards of any such works deliver benefits in terms of sustainability that are certifiable above the minimum level of the Building regulations (or another agreed measure).
- In order to incentivise better quality and more sustainable new build property, the existing 0% VAT rate on New Build Residential dwellings should be applied only where it can be demonstrated that works would deliver benefits in terms of sustainability that are certifiable above the minimum level of the building regulations where; where this can not be demonstrated, a standard 5% VAT rate should be applied
- The certifiable sustainability levels should be set above the regulatory minimums by a reasonable margin (to be determined) and to deliver greater fiscal neutralityⁱ (with no or reduced costs to the Exchequer).

For works of improvement and repairs this proposed realignment of VAT would:-

- Incentivise millions of UK home owners to deliver energy efficient repairs and improvements to their properties holistically, and incentivise those who might not otherwise consider undertaking sustainable improvements by making them more affordable.
- Incentivise work on improvement and repair, stimulating construction industry employment growth.
- Improve the standard, quality, outputs and professionalism of works of improvement and repair.
- Lower the overall cost of delivering sustainable construction whilst ensuring that
- Bringing empty homes back into use and contribute to protecting UK heritage.
- Change behaviour by reducing the “grey economy” incentive that is encouraged by the extent of current VAT differentials in construction. By reducing the differential and level of tax it is anticipated that this proposal would contribute towards drawing operatives out of the grey economy into the tax system.
- Make the UK's existing building stock greener and more energy efficient.

With buildings responsible for 40% of the UK's total carbon emissions, this measure would incentivise Government policy towards achieving its target of a 60% reduction in UK carbon emissions by 2050.

For new build it is considered that this realignment of VAT towards an output based construction performance would:-

- Incentivise sustainability in new construction.
- Contribute towards improvements in design and production quality across the industry.
- Incentivise sustainable performance and outcomes by better aligning objectives in commissioning, design and site construction by *“focus on delivery of outcomes that will enhance partnership approach and delivery”*.ⁱⁱ
- Rewards innovation and the commitment to investing in sustainability

Background: The Systemic Skew

VAT rates incentivise CO2 emissions by distorting the construction market in favour of new build construction to the detriment of sustainable husbandry, improvement and reuse of the existing built stock. Whilst new development is undoubtedly needed and desirable, the current system provides a perverse incentive against the refurbishment of existing stock. Furthermore, the existing 0% VAT rate on new build does not as it is currently formulated provide any in-built incentive to achieve linked to the sustainability of developments. This distorts and constrains the construction market in existing buildings. In summary:

- VAT differentials incentivise private finance expenditure (and any form of Public Private Partnerships) towards new build construction and divert this expenditure from improvement of the existing stock.
- Where UK Government permits, there are some highly specific energy saving measures for use in improvement works VAT rated at 5%, but this focuses work on specific and elemental works rather than holistically sustainable improvement. This also introduces significant complexity in the construction tax system.
- Application of differential VAT rates within different branches of one industrial sector constrains unitary government policy implementation across the sector overall.

New Policy objectives to address current imperatives should be applied to the historic separation of VAT in construction repairs and improvements from new residential building (implemented 1 June 1984).

Current VAT differentials incentivise emissions; distort the market and its ability to respond to necessary climate change policy; render initiatives complex and economically costly; directs investment in solutions towards new energy supply sources rather than to their point of consumption; with resources being targeted to a small number of larger scale projects at the expensive of general construction husbandry and smaller scale initiatives. This makes initiatives costly, the market unresponsive, inflexible and stifles innovation.

There is recognition that if sustainability objectives are to be achieved by reuse of the existing building stock this can't be addressed without realigning VAT differentials.

This fundamental market distortion is a major issue for sustainable green procurement policy:-

- *By 2050; probably 87% of the existing dwelling stock (approx. 21.8m) will remain with new dwellings built (since 1996) accounting for 9.4m. To achieve just 60%ⁱⁱⁱ CO2 reductions there needs to be reductions in the total energy demand of the existing UK homes of a projected 70% through performance improvement to both fabric and energy services along with a step change in energy supply efficiencies .^{iv}*
- *By 2050; Space heating of new dwellings are projected to average 2,000 kWh pa. whilst an average existing building are currently 14,600 kWh pa, with performance improvements of 5,600 kWh pa anticipated with existing technologies. "In other words the savings made in CO2 emissions (122,080m kWh pa) by addressing the existing dwelling stock outweigh, by a factor of approx 6.5, those that may arise from all new dwellings (Total 18,800m kWh pa). (NB Figures used assume that by 2020 all new dwellings are carbon neutral).*

The majority of CO2 emissions emanate from the existing building stock along with the process of new construction. To gear economic and commercial activity to efficiently deliver more universal mitigation the system should prioritise removing this market distortion which is a constraint on sustainable development.

Incentivisation and the principle of Payment By Results (PBR)

The primary objective of construction is the performance and quality (value) of the delivered buildings. By addressing and developing mechanisms to allow better output and performance incentives for outputs, delivery could be improved. This aligns with the Payment-by-Results principal (PBR)

Emissions and energy costs need to be factored into value considerations throughout construction if national and EU obligations are to be met and energy dependence reduced.^{vi}

Financially incentivising sustainability delivers the best and most cost efficient market lead approach for achieving a step change in the performance of sustainable construction nationally.

Implementation of the proposal

How might this proposal work in practice simply?

- Anticipated performance targets relative to Regulations or Standards would be set prior the commencement of construction.
- Or for example within the residential sector the standards to be achieved with respect to space and amenity of dwellings might also be an assessment. (which would be on submission of a planning application)
- In most general construction, sustainable performance targets are measurable against established criteria (building regulations, CFSH, codes, BREEAM standards, Space Standards, NPV & whole life etc) and can be professionally certified to a high standard, effectively and efficiently.
- Validation of space standards is measurable upon approval of a planning application.
- Certification of building performance at completion is currently available through a Building Regulations Completion Certificate. The remit of the Completion Certificate would be extended to cover certification of the performance standard sought and achieved.
- This certificate of a buildings performance standard upon completion would be forwarded to the tax office (HMRC).
- In view of the sums of money involved it might be advisable to consider having Completion Certificates audited by a sample spot checking method by an independent authority so as to ensure the system was transparent and uncorrupted.
- Implementation of any such approach needs to be consulted upon and staged sufficiently so as not to distort the financial formulations of existing project development programmes.

Option 1 – The ‘Stick’ Approach

If clients/design teams/contractors elected to construct projects targeted at achieving the lowest possible VAT level and the VAT level commensurate with the targeted outputs established at design/construction commencement were not achieved on completion-
At completion tax would become liable.

Default on liability might then incur a property charge etc.

- However Clients might be expected to transfer risk by:-
- maintaining a differential against an adverse completion certificate by way of adjustment to their own project retention (with such risk averse behaviour deflating construction investment),

- An increased % on the contractual retention (which would inflate construction costs and be a cash flow constraint on contracting)
- Transferring liability to the supply side.

Option 2 - The 'Carrot' Approach

If clients/design teams/contractors elected to construct projects targeted at achieving the higher levels of VAT, and the VAT level commensurate with the targeted outputs established at design/construction commencement was exceeded by the necessary levels on completion -

- At completion tax would become recoverable
- Contractual clauses embodying a gain-share could be embedded more easily better incentivising integrated team working, professionalism and higher standards of site construction.

Pros & Cons of the Two options above.

Option 1

- Might stimulate growth in sustainable construction better because it offers clients apparent cost benefit/savings,
- Might incentivise behavioural change most rapidly.
- And contribute most towards reducing the grey economy.

However:-

- It transfers risk to the client, who is more than likely to transfer this down the supply chain, (depleting the benefits).
- This option maybe best for addressing particular issues surrounding the refurbishment and reuse of property.

Option 2 may have more universal traction because:-

- It improves initial (cashflow) revenue to HMRC.
- It provides a better work place incentive structure
- and where-ever there is gain-sharing this might prove a more equitable incentive for both the client and their delivery team

However:-

- A client's financial incentive to invest in sustainable construction solutions is not significantly increased at the outset of a project as the benefits only accrue upon completion.

Initial Draft Recommendation:-

Pragmatically the easiest option for both fiscal, client and site administration would probably be to fix VAT rates at construction commencement for all at 5% using the 'stick' approach on refurbishment and using the 'carrot' approach on new build. It is also the approach most likely to rein in the grey economy. This would require clear communication and understanding of the liabilities which many in the refurbishment market might sustain.

Where sustainability or aspects of it might be measurable at planning stage ie through adoption of space standards in the residential sector - these might be considerations.

Under this policy option, exemptions or rebates for eg for infrastructure, or disability provisions at 0% might still be applied.

The Figures^{vii} (NB. Without any sustainability incentives being applied as per proposal)

The cost of reducing VAT on repair, maintenance and improvement of residential property from:-

20% to 5% approx -£2.2 billion

The revenue from raising VAT on the construction of new dwellings from:-

0% to 5% approx £1.5 billion

The difference to be allocated towards the objective for incentivising sustainability (& apportioned by sector values overall, and to be variable according to standards to be achieved) -£0.7 billion

How might this -£0.7b sum be recovered whilst still providing a clear incentive structure?

- As this policy should encourage greater engagement in the tax system it is anticipated that sums would be recovered from the grey economy.
- There are existing measurables. Eg costs are known covering factors such as construction costs in square meters for different performance specifications, Code for Sustainable homes ratings, BREEM ratings etc. for work in both new build and refurbishment. The size of the different construction sectors and their values are also measurable.
- Wherever a VAT ‘pay back’ mechanism might be applied, it could in anticipation of the larger capital expenditure outlay and liquidity issues be factored in.
- There is likely to be some initial behavioural inertia which would require time to become understood.
- The significant managerial costs of administering the existing differential VAT rates for different components of works on site (in refurb. particularly) might be anticipated to diminish improving efficiencies.

On balance therefore assessments might be derived which could adequately incentivise the objectives to achieve significantly more sustainable construction against measurable targets of risk to the exchequer, whilst delivering greater fiscal neutrality.

Appendix: Data and References

CURRENT CONSTRUCTION VAT RATES

- The construction of new buildings is charged a zero rate of VAT, provided the supply in question is for a social purpose: in effect, this means that only the construction of new houses, dwellings and buildings with a charitable purpose is zero-rated.
- Generally VAT is charged at the standard rate - currently 20% - on all repair, renovation and maintenance work whatever the status of the building concerned
- A new reduced rate of 5% was introduced for conversion or renovation works on some types of residential building from 12 May 2001.^{viii}

Construction VAT Schedule

Construction of a new building & work to an existing building
20%

Exemptions

construction of a new house or flat	0%
Conversion of a non residential build by a Housing Association into residences	0%
Approved alterations to listed buildings & communal dwellings	0%
Alterations for disabilities	0%
Renovation/alterations of empty residential properties	5%
Conversion of non residential into residences (others than RSLs)	5%
Specific energy saving methods	5%

VAT IN CONSTRUCTION HISTORY & PRACTICE

From

1973

When first introduced VAT was zero rated on all new construction and alterations, with repair work standard rated.

1 June 1984

only new construction work was zero rated.

1 April 1989

following a European Court ruling zero rating in construction was applied only for clearly defined social reasons. And that certain supplies then zero-rated in the UK did not satisfy these criteria, including the construction of buildings for industrial and commercial use and in the community and civil engineering sector.

July 1994

in the conversion of non-residential property into a dwelling, collection of dwellings or residential accommodation being zero-rated
in cases where the shell of a building was used in new construction, the work would be considered alteration for VAT purposes if at least two walls of an existing building were retained

EU Directive 92/77/EEC of 19 Oct 1992 –

In brief, no Member State can introduce any *new* zero rates of VAT, though they may continue charging any lower rates, including zero rates, that were in place on 1 January 1991. In addition Member States have the discretion to charge a reduced rate of VAT - between 5% and 15% - on a specified list of goods and services. One of the items of this list is the “provision, construction, renovation and alteration of housing, as part of a social policy.”^{ix}

July 2007 - EU Commission

published an impact study on the reduced VAT rates which argued that the use of “uniform rates is a superior instrument to maintain a high degree of economic efficiency, to minimise otherwise substantial compliance costs and to smooth the functioning of the internal market.” However, the authors supported the use of reduced rates in some areas, including social housing,

and the practice of countries “applying a uniform VAT to the whole set of social housing activities, including construction, maintenance, repair, restoration, re-construction and demolition. A harmonised VAT rate on a country level ... will provide equal incentives for both construction and restoration of existing housing, the latter contributing to preservation of urban cultural heritage.”^x

The EU Commission

recently examined the operation of the reduced rates and reported that reduced rates were a very imprecise tool for policy making and should not be used as a substitute for direct subsidies. That is very much in line with the Government’s thinking on the application of reduced rates. In general, we believe that widespread use of reduced VAT rates is likely to result in unnecessary complication of the tax, to the detriment of business and the integrity of the tax ... Obviously, there is a revenue issue. A recent estimate of the cost of reducing VAT to 5 per cent. for all house renovations was £1.1 billion. Even combined with a reduced rate on new construction, there would still be a very substantial loss to the Exchequer, which would have to be made up by increased taxation elsewhere^{xi}

July 1998 - Environment, Transport and Regional Affairs Committee

published a report on housing, and recommended that the Government should cut the rate of VAT on conversions “to as low a level as the law permits” and “consider redefining conversions so that VAT need not be charged on them.”^{xii}

The Urban Task Force, chaired by Lord Rogers, published in June 1999, Similarly argued for a unified VAT rate:

“Recent national statistics suggest that 87% of new housing is created through new build and only 13% through conversions.^{xiii} This can at least in part be explained by the fact that people looking to bring existing empty dwellings back into beneficial use soon find themselves up against an odd anomaly. Refurbishment or conversion of existing residential properties carries full VAT at 17.5%. New house building incurs no VAT, nor does conversion of commercial buildings for housing. There is therefore a strong case for harmonising the different rates, preferably by removing VAT on refurbishments or conversions of residential buildings, or introducing zero-rating.

Although this seems a sensible thing to do, constraints imposed by the European Commission may mean that harmonisation is only possible at the intermediate level of 5%. While harmonisation at 5% would increase the costs of developing new dwellings on greenfield sites, it would also affect brownfield development as well. Development schemes on recycled land are already more marginal in commercial terms. The imposition of VAT would therefore increase the costs and, in many cases, increase the need for public subsidy. Therefore, while VAT harmonisation at 5% would create substantial revenue for the Treasury, a significant amount of that total might be required to increase regeneration funding to tackle the additional costs of development on previously used land. It is essential that the UK presses the European Commission to enable harmonisation to occur without the need to impose VAT on new build housing development. Only if this is impossible should a 5% rate be

considered. In those circumstances, there will need to be a significant lead-in time prior to the introduction of the tax on new build costs, so that developers are not hit by additional costs which they have not accounted for in acquiring land for development. There will also need to be careful consideration of how VAT would apply to new build — to the cost of materials, labour, sales etc., to avoid any unintended double imposition.

Urban Task Force recommendation:

Harmonise VAT rates at a zero rate in respect of new building, and conversions and refurbishments. If harmonisation can only be achieved at a 5% rate, then a significant part of the proceeds should be reinvested in urban regeneration.^{xiv}

December 2008 Bob Russell MP EDM Motion to Westminster

“That this House supports calls from the Federation of Master Builders for a reduction in the rate of value added tax (VAT) to five per cent. on building repair and improvement work to existing buildings; believes that reducing VAT on repairs and maintenance to existing buildings would benefit millions of UK home owners by getting rid of rogue builders, helping those who cannot afford vital repairs to their homes, bringing empty homes back into use, and protecting the countryside and UK heritage; considers that reducing VAT to five per cent. in this area would also make it easier for home owners to make energy efficient repairs and improvements to their properties, thus helping to make the UK's existing building stock greener and more energy efficient; and notes that, with buildings responsible for 40 per cent. of the UK's total carbon emissions, this measure would go some way in helping the Government to meet its target of a 60 per cent. reduction in UK carbon emissions by 2050^{xv} “

The Baker Report appeared to established grounds for opposing change at this stage on the following basis

“Some suggestions to the Review have recommended that new build and repairs, maintenance and improvement (RMI) be made more equal through a ‘levelling down’ of the VAT on RMI to a lower rate of 5 per cent rather than a ‘levelling up’ of VAT on new build. Equalising the rates as far as possible under EU law would encourage individuals to improve and maintain their existing homes – and would go some way to helping the Government meet its decent homes target.

While increased RMI work might be broadly helpful in promoting better care of the existing stock, a significant proportion of investment in housing in the UK is individuals upgrading their homes beyond that required to keep them in a decent and habitable condition. Reducing the cost of RMI across the board would act as an incentive to all home improvement, and consequently subsidise a great deal of work that would have happened anyway, generating a (possibly substantial) deadweight loss. Evidence suggests also that it is the relatively affluent who spend most on RMI, and thus an across-the-board RMI VAT cut would be broadly regressive.^{xvi}

(At this time it was estimated that “the effect of harmonising VAT on the repair, maintenance and improvement of dwellings currently at 17.5% and on the construction of new dwellings currently zero rated, at 5% would be

broadly revenue neutral,” whereas replacing the zero rate on new housing with a 5% rate “might raise up to £1.9 billion.”^{xvii}

2011 July The revenue impact of harmonising VAT rates

The Commercial Secretary to the Treasury (Lord Sassoon):

“The cost of reducing VAT from 20 per cent to 5 per cent on repair, maintenance and improvement of residential property, in the absence of behavioural change, is tentatively estimated to be in the region of £2.2 billion.

The revenue from VAT at 20 per cent on the conversion of non-residential into residential property, in the absence of behavioural change, is estimated to be about £300 million, compared to an estimate of about £75 million at the current 5 per cent rate.”

The revenue from making the construction of new dwellings liable to VAT at 5 per cent rate, in the absence of behavioural change, is estimated to be about £1.5 billion.^{xviii}

February 2013: European Commission legal challenge on reduced VAT rates for renewables:

The European Commission filed a legal challenge to the European Court of Justice on February 21st 2013 regarding the reduced 5% VAT rate set by the UK Government for the supply and installation of energy saving material, requesting the UK rate be overturned. The Commission argued that the EU VAT law does not allow EU member states to apply reduced rates on “energy saving materials,” and that states may only apply reduced VAT rates to the supply of goods and services used in the housing sector where this is part of a social policy.

ⁱ HL Deb 18 July 2011 ccWA254-5 **The Commercial Secretary to the Treasury (Lord Sassoon):** “The cost of reducing VAT from 20 per cent to 5 per cent on repair, maintenance and improvement of residential property, in the absence of behavioural change, is tentatively estimated to be in the region of £2.2 billion.

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ⁱⁱ *Agile Procurement* _HM Gov. Presentation ‘A New way of Working’ - 21 Nov 11

ⁱⁱⁱ *Ibid*

^{iv} *The Challenge of Existing UK Houses*. Dr Brenda Boardman Environmental Change Institute, Oxford Henderson Colloquim Cambridge 10-12 July 2006

^v *Ibid* :- “The embodied energy and carbon in a new building is offset after about 13 years, if the construction is to a high standard of energy efficiency and low level of energy consumption.”

^{vi} The UK is committed to two legally binding EU Directives: the European Climate Change Act 2008 and the 2009 Renewables Obligation. The first commits to reducing carbon emissions from 1990 levels by 80% by 2050 the second that by 2020 25% of UK energy has to come from renewable.

^{vii} HL Deb 18 July 2011 ccWA254-5. The Commercial Secretary to the Treasury - Lord Sassoon

^{viii} *VAT on Construction SN00587* 11 Oct. 2011 House of Commons Library

^{ix} *Item 10 to Annex III of Council Directive 2006/112/EEC*

^x *Copenhagen Economics, Study on reduced VAT applied to goods and services in the Member States of the European Union*, 21 June 2007 pp 3-4, p80

^{xi} HC Deb 11 March 1998 cc 727-730

^{xii} *Environment, Transport and Regional Affairs Committee, Housing*, 22 July 1998 HC 495 1997-98 para 254. *The Government’s response at the time was non-committal (Cm 4080 October 1998 pp11-12).*

^{xiii} DETR, *English House Condition Survey 1996, 1998*

^{xiv} DETR, *Towards an Urban Renaissance*, June 2000 [Dep 99/1269] p255

^{xv} EDM 7 of 2008-09, 3 December 2008. 133 Members signed the motion. A similar motion which Mr Russell put down in the current Session has been signed by 27 Members (EDM 59 of 2010-12, 25 May 2010).

^{xvii} *Housing Supply: Delivering Stability: Securing our Future Housing Needs - Final Report: Recommendations, March 2004 p 83. Details on the review are collated at:*

http://www.hm-treasury.gov.uk/consultations_and_legislation/barker/consult_barker_index.cfm

^{xviii} HC Deb 15 January 2001 c 128W; HC Deb 14 November 2005 c 883W

^{xix} HL Deb 18 July 2011 ccW/A254-5
