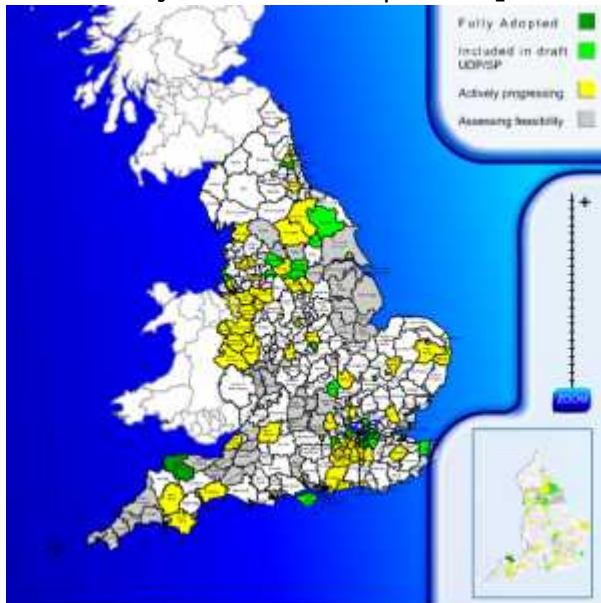


# The Merton Rule - an investigation

written by Clive Bates | 30 September 2007



Once it was famous only for the '70s Mod-revival band, [The Merton Parkas](#). And, frankly, it wasn't *that* famous even for them. But now the London Borough of Merton is famous for the eponymous 'Merton Rule'. As the map left shows, local government across the nation [[list](#)] is at various stages of implementing the Rule. The Merton Rule is a planning condition requiring on-site generation of renewable energy:

*All new non residential developments above a threshold of 1,000sqm will be expected to incorporate renewable energy production equipment to provide at least 10% of predicted energy requirements* [[Merton council site](#)][[Merton Rule site](#)]

But how does it actually work and does it make sense?

The intention is to develop this to residential development over 10 units and possibly to increase the percentage to 20%. But a storm has erupted: the champions of the Merton Rule believe the government is about to put a stop to it in a craven capitulation to the building industry, which doesn't like the high costs of complying and has the government over a barrel on delivering targets for housing growth [see recent Guardian articles: [Don't scrap green housing rule, urge campaigners](#) and [Green groups warn energy minister against U-turn](#)]. The [case for the defence](#) has been developed and a [petition](#) opened on the No 10 web site. Let battle be joined!

**But is the Merton Rule actually a good idea?** At first reckoning, I'd say: 'no it obviously isn't'. But with a second glance, there's a real surprise in the way it is actually working: so perhaps I'd say 'yes maybe, sort of...'. On final reckoning, I'd say: 'it's up to them'.

### **First sight: it's a bad idea...**

The argument against it is quite straightforward - why make builders use cumbersome expensive renewable energy when the same outcome in terms of reduced energy emissions can be achieved on other and often better ways? (see my blog on [solar PV](#) and [domestic wind-power](#) for reason to be a small-scale renewables sceptic). The real objectives could be better met by on-site energy efficiency investments or CHP, or by off-site renewables generation where economies of scale and location may be chosen more carefully. Surely, the aim should be to specify the energy / carbon performance of the building and let the developers meet the requirement in the most cost effective way - a process that should drive innovation by rewarding ingenuity in meeting the target better. The new voluntary [Code for Sustainable Homes](#) could be used to impose binding energy-related conditions beyond the requirements of the building regulations through planning conditions imposed locally. In fact, the government appears to want to do this anyway; it is aiming to have all new homes as 'zero carbon' by 2016 by progressively making the more ambitious levels of the Code mandatory, with level 6 (zero carbon) the standard beyond 2016 (see [Building a greener future: towards zero carbon development p.13-15](#)). Surely it would be wrong to be overly prescriptive about how that very ambitious target should be met? I don't actually know what the government is planning, but as you can probably tell, I have some sympathy for this view.

Pro-Merton Rule campaigners fear that the government might use an argument like this in the forthcoming Planning Policy Statement (PPS) on Climate Change [see [Consultation](#) / [Responses](#)] and that it is backing away from Housing Minister Yvette Cooper's apparent support for the Merton Rule in a [June 2006 speech](#), or that it is decommitting from statutory obligations to deliver a strategy for promotion of microgeneration in the [Energy Act 2004 s84](#). But none of this answers the question of whether is a good thing, and a strategy for promoting microgeneration might be no more than publicity and enabling measures where people want to use it.

### **Second glance: Merton Rule - good idea for an unintended reason?**

Why might one think it is a 'maybe, sort of' good idea/ It turns out the Merton Rule in practice drives energy efficiency precisely because the renewable are so expensive and cumbersome. If the target is 10% of energy from renewables, the developer can reduce the amount of renewables needed by improving the energy

efficiency - for example halving the energy consumption of the building would reduce the renewable spend by half, but reduce emissions crudely as follows:

100 = base case emissions from building with no Merton Rule

90 = emissions if Merton Rule taken literally with no compensating changes

45 = emissions if developer halves energy use to reduce spending on renewables

5 = emissions saved by renewables

50 = emissions saved by energy efficiency

Thus in a 50:5 ratio, the compensating and avoiding measures give the dominant effect over the headline policy! The managing Director of a major green buildings director told me last week that this is basically what is happening in the real world where the Merton Rule is applied. How true and to what extent, I can't verify - but the argument is plausible. An economist would expect the 'rational developer' (er...?) would introduce energy saving measures to the point where the marginal cost of energy efficiency investment per avoided KWh = 1/10th avoided marginal cost of renewables (you can imagine one of those crossing lines graphs would show this) + a factor for any benefit that would increase value of the property from having lower energy consumption.

**Rule overcomes the 'split incentives' problem...** The really interesting thing about this is not the renewable component at all, but that the developer bears a high cost in proportion to the energy use of the building. In fact, if renewables were even more expensive, the energy efficiency measures justified would be even more. It could even be a requirement to erect a bronze obelisk with height in proportion to the energy consumption of the building and it would have almost the same effect. This 'internalisation' of future energy costs to the developer overcomes one of the perennial barriers to energy efficiency - 'split incentives': namely that the developer pays for the energy using/wasting building fabric, glazing, lighting, [HVAC](#) etc but doesn't bear the energy running costs, which fall to the occupier. This tends to mean, all other things being equal, that buildings are built with less than the optimum level of energy efficiency if the full life costs are considered.

**Finally - leave it to local government...**

Could those following the Merton lead do better? They probably could.

First we must understand who pays for the renewables on a new development. When planners impose conditions on a development (environmental

improvements, affordable housing, support for public services, road building etc) it is basically paid for from 'planning gain'. That is the huge lift in the underlying land price that happens when planning permission for property development is granted. One of the great arts in local government is to extract as much of that planning gain as possible without killing off the development. So-called '[section 106 agreements](#)' are the current approach and there has been lengthy discussion of a '[planning gain supplement](#)', which would be a tax on the uplift on land value. As long as the developer is making enough money on the property they will be able to surrender most of the windfall planning gain - which is then available for worthy public purposes. Developers of course want to limit the mining of planning gain as far as possible or restrict it to those things that add to the value of the property - landscaping, flood defences, local services etc. So developers push back on any new calls on planning gain. The renewables probably add very little to the value of the property, so the money will come from the developer. However, if the planning gain is there and it is available for renewables, it could also be captured and used for something else - including reducing emissions in more cost effective ways. In this way, it represents an [opportunity cost](#) to the council. This means there is a [zero-sum game](#) at work, and the key challenge for the council is to get the best social return on investment from the captured planning gain. To me, the money spent on on-site renewables, even after the developers have reduced energy consumption, is still poor spending. The question could be reframed by a council thinking about its carbon mitigation policy: *for that part of the planning gain that we are able to capture and wish to devote to reducing carbon, what is the maximum carbon we can reduce?* I doubt it would be to demand 10% renewables. Some other approaches...

**An energy-related planning tariff?** So suppose that, instead of a requiring a bronze obelisk to be erected as I proposed above, the council simply levied a tariff on the developer in proportion to the energy consumption of the building or level of the Code for Sustainable Homes? The idea of tariffs instead of planning obligations is in any case gaining ground, so it might be workable. In that way, the incentives to reduce energy would be the same for the developer, but the council would have the money to spend on cost effective energy. It could for example, purchase off-site renewable energy for its own estate, renovate social housing, auction the money back to developers to make further savings, invest in energy efficiency in the existing building stock, address fuel poverty, even fund emissions reduction in developing countries or retire EU Emissions Allowances.

**Insisting on higher Code levels?** Alternatively, they could just insist on developers reaching ever higher levels of the Code for Sustainable Homes - a more rounded form of planning obligation than the 10% target.

**Require life-time costing?** They could require the developer to invest a proportion of the life time energy cost in energy in reducing energy use to an optimum level. The council would play a proxy role to reflect the interests of the future occupiers.

### **Innovation in local government policy-making**

Others will have many and better ideas than these - so how do we get to the ones that work? Not by forcing everyone to take the same approach - and I'd definitely be against any attempt to make the Merton Rule mandatory. My overall take is that local government needs to be free to experiment and take different approaches, then we can all learn from what happens, do more of what works and less of what doesn't. If government is setting objectives at all, then they should be for broad outcomes, with local government having space for policy innovation. Local government is ideally placed to attempt diverse approaches and as long as some sort of evolutionary selection mechanism (the voter perhaps, but if not, the Audit Commission) can ensure the best ideas are spread more widely, then we will have a good system.

### **So to summarise:**

- The Merton Rule is too *dirigiste* and isn't good policy because it is focussed on inputs not outcomes, limiting developer innovation and costing more than necessary - with opportunity costs for councils as there is less planning gain available for other things.
- However, it has unintended beneficial side effects that are likely to be more important than the intended impact by overcoming the split-incentive barrier to energy efficiency through implicitly exposing developers to future energy costs. Developers are investing in cutting energy consumption to get to 10% renewables on the base of a smaller energy footprint.
- If we are serious about local government, we should encourage local policy innovation and make sure all involved learn from it - amplifying the good and stopping the unsuccessful. When the Merton Rule was introduced, there was no Code for Sustainable Homes or government

zero-carbon commitment. Merton was innovative and we should learn from its boldness, but the boldest thing Merton could do now would be drop the Merton Rule and focus on the Code for Sustainable Homes, though without being made to do it Central government.